

Proceedings of the American Academy of Arts and Sciences.

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RECORDS OF MEETINGS, 1911-1912.

OFFICERS AND COMMITTEES FOR 1912-1913.

LIST OF THE FELLOWS AND FOREIGN HONORARY
MEMBERS.

BIOGRAPHICAL NOTICES.

THOMAS WENTWORTH HIGGINSON. BY ANDREW MCFARLAND
DAVIS.

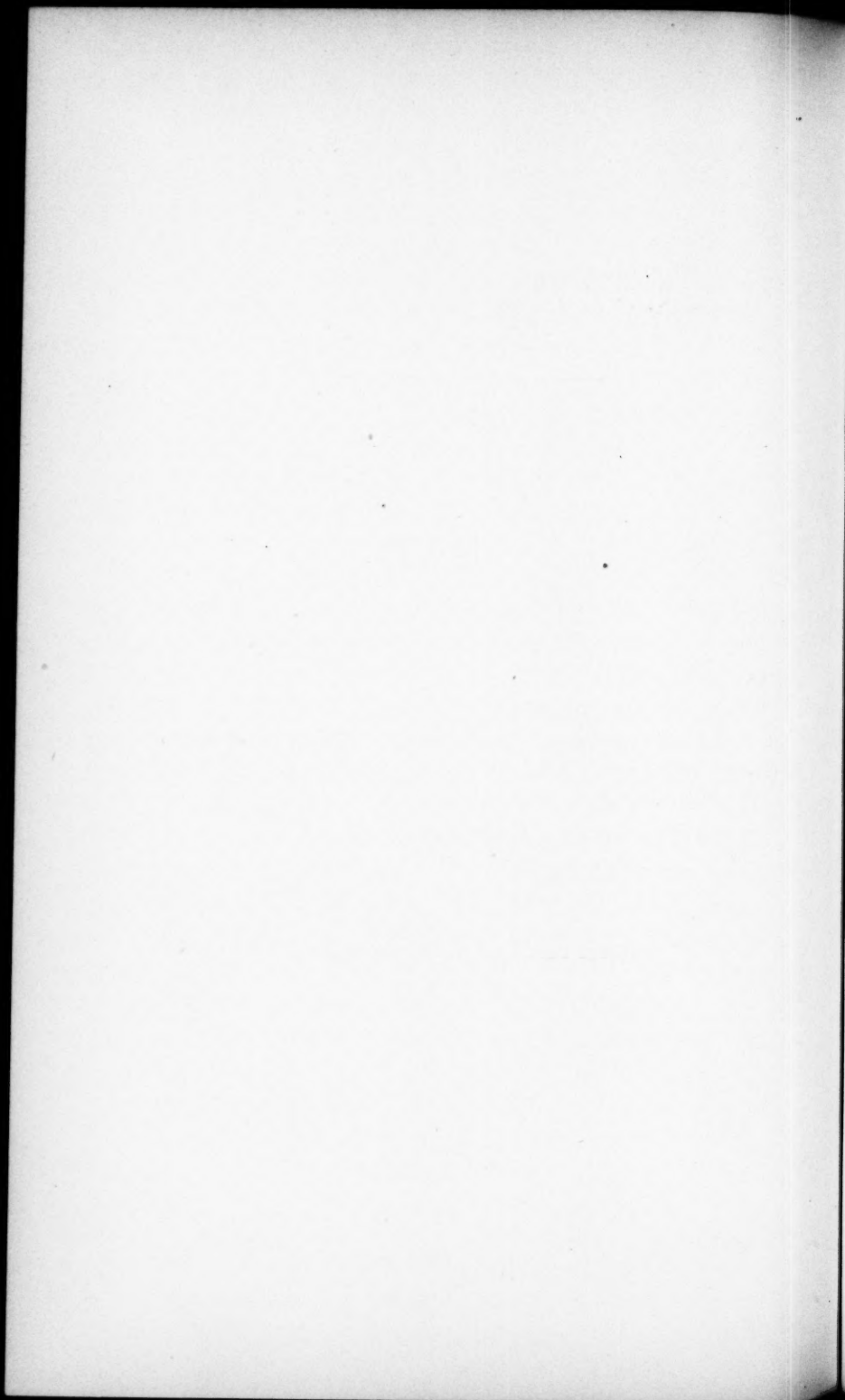
FREDERICK IRVING KNIGHT. BY FRANCIS H. WILLIAMS.

STATUTES AND STANDING VOTES.

RUMFORD PREMIUM.

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RECORDS OF MEETINGS.

One thousand and seventh Meeting.

OCTOBER 11, 1911. — STATED MEETING.

The Academy met in Ellis Hall, in the Massachusetts Historical Society's Building.

The PRESIDENT in the chair.

There were thirty-seven Fellows present.

The Corresponding Secretary presented the following letters and circulars:— from the University of Minnesota, inviting the Academy to be represented at the inauguration of George Edgar Vincent as its President; the preliminary announcement of the eighth International Congress of Applied Chemistry; a notice of contest for the Elia de Cyon prize; a request for subscriptions for the purchase of the birthplace of Pasteur; from the Naturforschende Gesellschaft zu Görlitz, inviting the Academy to be represented at the celebration of its centenary; a notice from the Surrogates' Court of New York regarding the property of Catherine R. B. Griffith; a notice regarding the probating of the will of Mary H. Cooke.

The following deaths were announced by the Chair:—

Samuel Hubbard Scudder, Resident Fellow in Class II., Section 3, Corresponding Secretary and Chairman of the Publication Committee from 1896 to 1900, Librarian from 1877 to 1885; Cyrus Gurnsey Pringle, Associate Fellow in Class II., Section 2.

At the request of the C. M. Warren Committee it was

Voted, That the sum of two hundred dollars (\$200) be appropriated from the income of the C. M. Warren Fund for the use of the Committee.

The following gentlemen were elected Fellows of the Academy:—

In Class I., Section 1 (Mathematics and Astronomy):—

Joel Hastings Metcalf, of Winchester; Edwin Bidwell Wilson, of Cambridge; Lewis Boss, of Albany.

In Class I., Section 2 (Physics):—

Harvey Nathaniel Davis, of Cambridge; Harry Wheeler Morse, of Cambridge; Joseph Sweetman Ames, of Baltimore.

In Class I., Section 3 (Chemistry):—

William Crowell Bray, of Boston; Forris Jewett Moore, of Boston; Willis Rodney Whitney, of Schenectady.

In Class I., Section 4 (Technology and Engineering):—

Dugald Caleb Jackson, of Boston; Frederic Pike Stearns, of Boston; Charles Proteus Steinmetz, of Schenectady.

In Class II., Section 1 (Geology, Mineralogy, and Physics of the Globe):—

Herdman Fitzgerald Cleland, of Williamstown; Hervey Woodburn Shimer, of Boston; Charles Richard Van Hise, of Madison.

In Class II., Section 2 (Botany):—

Oakes Ames, of North Easton; Edward Murray East, of Jamaica Plain; Robert Almer Harper, of Madison.

In Class II., Section 3 (Zoölogy and Physiology):—

Henry Bryant Bigelow, of Concord; Otto Knut Olof Folin, of Brookline.

In Class II., Section 4 (Medicine and Surgery):—

Milton Joseph Rosenau, of Boston; Elmer Ernest Southard, of Boston; Simon Flexner, of New York.

In Class III., Section 1 (Philosophy and Jurisprudence):—

Melville Madison Bigelow, of Cambridge; Marcus Perrin Knowlton, of Springfield; George Vasmer Leverett, of Boston; Roscoe Pound, of Belmont; Woodrow Wilson, of Princeton.

In Class III., Section 2 (Philology and Archaeology):—

Fred Norris Robinson, of Cambridge; Charles Cutler Torrey, of New Haven.

In Class III., Section 3 (Political Economy and History):—

Edward Channing, of Cambridge; Frederick Jackson Turner, of Cambridge; John Franklin Jameson, of Washington.

In Class III., Section 4 (Literature and the Fine Arts):—

William Sturgis Bigelow, of Boston.

The following report of the Committee on the Revision of the Statutes was read by the Chairman, Mr. Henry H. Edes:—

At the Stated Meeting of the Academy in March, several amendments to the Statutes were adopted upon the favorable report of the Committee to which they had been duly referred. At the same meeting, further important amendments were proposed, chiefly for the purpose of defining some of the newly-created functions and powers of the Council, of enlarging the functions of the Class Committees, and of prescribing the procedure of both bodies with respect to the nomination and election of Fellows and Foreign Honorary Members. These new amendments also proposed an increase in the number of Councilors from nine to twelve and of their terms of service from three years to four years, thereby insuring always to each Section of each Class at least one representative in the Council, which, with the eight *ex-officio* members, elected annually for terms of one year, would then be composed of twenty persons.

These amendments having been duly referred to a Committee for consideration and report, it was suggested from the floor, that as the recent adoption by the Academy of the several far-reaching recommendations of the Committee on Policy necessitated so many alterations in the Statutes, other changes, doubtless, would, in consequence, suggest themselves to the Committee; and the hope was expressed that it would feel warranted in incorporating in its report upon the amendments then referred to it such further changes as it might deem expedient. Whereupon, it was unanimously voted by the Academy that the Committee be authorized and requested to act accordingly.

The present Code of Statutes was adopted on the thirtieth of May, 1854. When the last printed edition appeared, in June, 1910, it had been then amended twenty-one times. Among the inevitable results of so many changes are tautology, repetition, and the distribution under two or more heads of subjects which should be treated in a single chapter. There are also strange omissions. For instance, there are no Articles describing the Corporate Seal of the Academy or providing for the attestation and delivery of the Academy's Diploma; indeed, the fact that the Society has a Common Seal is not even recognized, save by a casual allusion to it in the Chapter defining the duties of the President, while there is no mention whatever of a Diploma.

The new powers given to the Council by the amendments adopted in March last necessitated the draughting of an entirely new Chapter; while a proper recognition of the Seal required another. On the other hand, it was desirable that certain chapters should be consolidated, and repetitions eliminated, especially in the Chapter on Standing Committees, where three lines of print are five times repeated, and three other lines are four time repeated.

From what has been already said, it will be readily seen that the only way in which the problem before us could be satisfactorily dealt with was by recasting and re-arranging the whole Code. This has been done and the result submitted to the Academy in print during the past few days.

The principal changes, beside those already referred to, are (i) the fixing of the limit of the number of Fellows at Six hundred, — those residing in Massachusetts not to exceed Four hundred, as provided in the amended Charter ; (ii) raising the limit of the Annual Dues, to be annually voted and determined by the Academy, from Ten dollars to Fifteen dollars ; (iii) providing for a Commutation of the Annual Dues by the payment at one time of Two hundred dollars ; (iv) restricting elections to the Stated Meetings in January and May ; (v) providing that the Annual Report of the Treasurer shall be submitted in print ; (vi) establishing the date when the financial year of the Academy shall begin ; (vii) reducing the time in which delinquents may pay their Annual Dues from two years to six months ; and (viii) the incorporation of some Standing Votes with those Chapters of the Statutes to which they pertain and in which they appear to your Committee to be more appropriately placed.

The new machinery for the nomination and election of Fellows and Foreign Honorary Members, if adopted by the Academy, cannot fail to result in a closer scrutiny by the Class Committees of the names proposed, and a more careful and discriminating selection by the Council of those presented to the Academy for its consideration.

Conciseness, concentration, comprehensiveness, and conformity were the principal objects aimed at by your Committee in redrafting the Code. Except in one or two unavoidable instances, no provision of the Statutes affecting more than one officer, committee, or subject has been repeated, such provisions being clearly indicated under their appropriate secondary headings by cross-references to the Chapter and Article where the text of the provision is printed.

Your Committee has given careful consideration to proposals for rotation in office applying to the eight Officers and the Standing Committees annually elected by the Academy, and for an increase in the number of members of some of the other Committees ; but it is unanimously of opinion that the adoption of these propositions would not be wise. Experience gained by long, continuous service on such a committee, for instance, as that which administers the Rumford Fund, is valuable to the Academy ; while for such service as is expected from those committees which it was proposed to enlarge, small bodies are generally more efficient than large ones.

In conclusion, your Committee begs leave to present for consideration the accompanying votes, intended to give effect to the new Code if it shall prove acceptable to the Academy.

Respectfully submitted,

HENRY H. EDES,
ELIHU THOMSON,
HENRY LEFAVOUR,
Committee.

BOSTON, October 11, 1911.

I. That the Report of the Committee on the Revision of the Statutes and Standing Votes is hereby accepted and the Code submitted therewith adopted.

II. That all previously adopted Statutes and Standing Votes are hereby repealed.

III. That the places of those Councillors whose terms will expire in May, 1913, and May, 1914, are hereby declared vacated at the Annual Meeting in May, 1912; and that the Councillors affected by this vote shall be eligible for renomination and re-election at that time.

This was followed by discussion. As the time was too limited to consider the whole subject, it was

Voted, To meet on adjournment, November 8th, when the discussion would be continued.

The following papers were presented by title:—

“Water, in the Liquid and Five Solid Forms, under Pressure.”

By P. W. Bridgman. Presented by G. W. Pierce.

“Mercury, Liquid and Solid, under Pressure.” By P. W. Bridgman. Presented by G. W. Pierce.

“A New Method of Impact Excitation of Undamped Oscillations and Analysis by Means of Braun Tube Oscillographs.” By E. L. Chaffee. Presented by G. W. Pierce.

“The Measurement of Hydrostatic Pressures up to 20,000 Kilograms per Square Centimeter.” By P. W. Bridgman. Presented by G. W. Pierce.

“Polycerella Zoobotryon (Smallwood). By W. M. Smallwood. Presented by E. L. Mark.

Because of the lateness of the hour the communication announced was not presented.

One thousand and eighth Meeting.

NOVEMBER 8, 1911. — ADJOURNED STATED MEETING.

The Academy met at Ellis Hall.

The PRESIDENT in the chair.

There were forty-four Fellows and one guest present.

The Corresponding Secretary read letters from the following gentlemen, accepting Fellowship: — Joel H. Metcalf, Lewis Boss, Harvey N. Davis, Harry W. Morse, Joseph S. Ames, William C. Bray, Willis R. Whitney, Dugald C. Jackson, Fred-eric P. Stearns, Herdman F. Cleland, Hervey W. Shimer, Charles R. Van Hise, Oakes Ames, Edward M. East, Robert A. Harper, Milton J. Rosenau, Melville M. Bigelow, Marcus P. Knowlton, George V. Leverett, Woodrow Wilson, Fred N. Robinson, Charles C. Torrey, Edward Channing, Frederick J. Turner, William S. Bigelow; from John F. Jameson, declining Fellowship; from the Executive Committee of the Eighth International Congress of Applied Chemistry, inviting the Academy to join the Congress and to take part in its proceedings in Washington, September 4, 1912, and New York, September 5-13, 1912; from Wssewolod Tscheschichin, Riga, regarding a new international language.

Mr. Charles P. Bowditch presented a subscription paper, dated March, 1849, and signed by prominent members of the Academy. This interesting paper, which gave the amounts subscribed to a publication fund, was found among his father's papers.

The President announced that the Boston Athenaeum had consented to return to the Academy the bust of Franklin which was given it by the American Philosophical Society in 1802, and read the following letters: —

10 APPLETON STREET, CAMBRIDGE, October 23, 1911.

Mr. JOHN TROWBRIDGE, President.

Dear Sir: — I am authorized by the Trustees of the Boston Athenaeum to announce to you that the Athenaeum presents to the Academy, the bust of Franklin which has for many years stood in the vestibule of the Athenaeum building. The circumstances under which I have become an intermediary in this transaction are these —

In 1800, the American Philosophical Society received by gift a plaster cast of a bust of Franklin. In 1802, the same society received another and probably a different bust. At any rate, the Philosophical Society presented a bust of Franklin to the Academy, presumably one of these, and to-day the Academy has no such bust.

On the other hand, the Athenaeum has no conclusive record as to the source from which possession was derived by that society of the bust in the vestibule.

It appears by our records that the gift by the Philosophical Society was made in 1802, the same year that the second bust was given to that society. The Athenaeum bust is said to be a replica of a bust by Houdon. It is not a replica of the bust in possession of the Philosophical Society, but represents Franklin at the same period of life, and in many respects there is a close resemblance between the two busts.

Believing that the Athenaeum bust was probably ours, yet feeling that there was no method available for proving this, I requested permission to have a replica made of that bust, either for us, or to replace the Athenaeum bust, as the Trustees might prefer.

The application brought me a reply, a copy of which I enclose, in which it will be seen that the Athenaeum presents the bust to the Academy. I have the honor to be,

Yours very truly,

A. MCF. DAVIS.

The following is a copy of the letter enclosed:—

LIBRARY OF THE BOSTON ATHENAEUM,
Charles Knowles Bolton, Librarian.

Boston, Mass., October 17, 1911.

ANDREW MCFARLAND DAVIS, Esq.,

10 Appleton Street, Cambridge, Mass.

Dear Sir:—Your letter addressed to me and dated October 14th was brought before the Trustees of the Athenaeum at their meeting yesterday. The Trustees wish me to say that, on account of the long and friendly relation which has existed between the American Academy of Arts and Sciences and the Proprietors of the Boston Athenaeum, they welcome your letter as an opportunity to continue these evidences of good will. They therefore instruct me to present through you to the American Academy the plaster replica of the bust of Franklin mentioned in your letter.

If at some time in the future the Athenaeum should desire a rep-

lica of this bust, we have no doubt that the Academy would look with favor upon our request; but that may be left to the future.

Very truly yours,

CHARLES K. BOLTON.

It was

Voted, That the thanks of the Academy be extended to the Boston Athenaeum for restoring to the Academy the replica of the bust of Benjamin Franklin, and their courteous expression of interest in the Academy. Also that the thanks of the Academy be extended to Mr. Davis for his efforts in securing this bust for the Academy.

The consideration of the Report of the Committee on the Revision of the Statutes continued from the October meeting was resumed and the Code discussed at length, after which the following votes were passed:—

1. *Voted*, That the Report of the Committee on the Revision of the Statutes and Standing Votes is hereby accepted and the Code submitted therewith, as amended, adopted.

2. *Voted*, That all previously adopted Statutes and Standing Votes are hereby repealed.

3. *Voted*, That the places of those Councillors whose terms will expire in May, 1913, and May, 1914, are hereby declared vacated at the Annual Meeting in May, 1912; and that the Councillors affected by this vote shall be eligible for renomination and re-election at that time.

On motion of Dr. G. F. Moore, it was also

Voted, That the Committee on the Revision of the Statutes is hereby authorized to make such verbal changes in the code just adopted as may be necessary or desirable to bring all its provisions into harmony with the Academy's action at this meeting, or to improve the style.

The final wording of the Statutes, here adopted, is as follows:

STATUTES AND STANDING VOTES

STATUTES

ADOPTED NOVEMBER 8, 1911

CHAPTER I

THE CORPORATE SEAL

ARTICLE 1. The Corporate Seal of the Academy shall be as here depicted :



ARTICLE 2. The Recording Secretary shall have the custody of the Corporate Seal.

See Chap. v. art. 3 ; chap. vi. art. 2.

CHAPTER II

FELLOWS AND FOREIGN HONORARY MEMBERS AND DUES

ARTICLE 1. The Academy consists of Fellows, who are either citizens or residents of the United States of America, and Foreign Honorary Members. They are arranged in three Classes, according to the Arts and Sciences in which they are severally proficient, and each Class is divided into four Sections, namely :

CLASS I. *The Mathematical and Physical Sciences*

Section 1. Mathematics and Astronomy

Section 2. Physics

Section 3. Chemistry

Section 4. Technology and Engineering

CLASS II. *The Natural and Physiological Sciences*

Section 1. Geology, Mineralogy, and Physics of the Globe

Section 2. Botany

Section 3. Zoölogy and Physiology

Section 4. Medicine and Surgery

CLASS III. *The Moral and Political Sciences*

Section 1. Theology, Philosophy, and Jurisprudence

Section 2. Philology and Archaeology

Section 3. Political Economy and History

Section 4. Literature and the Fine Arts

ARTICLE 2. The number of Fellows shall not exceed Six hundred, of whom not more than Four hundred shall be residents of Massachusetts, nor shall there be more than Two hundred in any one Class.

ARTICLE 3. The number of Foreign Honorary Members shall not exceed Seventy-five. They shall be chosen from among citizens of foreign countries most eminent for their discoveries and attainments in any of the Classes above enumerated. There shall not be more than Twenty-five in any one Class.

ARTICLE 4. If any person, after being notified of his election as Fellow, shall neglect for two months to accept in writing and to pay his Admission Fee (unless he be at that time absent from the Commonwealth) his election shall be void ; and if any Fellow resident within fifty miles of Boston shall neglect to pay his Annual Dues for twelve months after they are due, provided his attention shall have been called

to this Article of the Statutes in the meantime, he shall cease to be a Fellow ; but the Council may suspend the provisions of this Article for a reasonable time.

With the previous consent of the Council, the Treasurer may dispense (*sub silentio*) with the payment of the Admission Fee or of the Annual Dues or both whenever he shall deem it advisable. In the case of officers of the Army or Navy who are out of the Commonwealth on duty, payment of the Annual Dues may be waived during such absence if continued during the whole financial year and if notification of such expected absence be sent to the Treasurer. Upon similar notification to the Treasurer, similar exemption may be accorded to Fellows subject to Annual Dues, who may temporarily remove their residence for at least two years to a place more than fifty miles from Boston.

If any person elected a Foreign Honorary Member shall neglect for six months after being notified of his election to accept in writing, his election shall be void.

See Chap. vii. art. 2.

ARTICLE 5. Every Fellow hereafter elected shall pay an Admission Fee of Ten dollars.

Every Fellow resident within fifty miles of Boston shall, and others may, pay such Annual Dues, not exceeding Fifteen dollars, as shall be voted by the Academy at each Annual Meeting, when they shall become due ; but any Fellow shall be exempt from the annual payment if, at any time after his admission, he shall pay into the treasury Two hundred dollars in addition to his previous payments.

All Commutations of the Annual Dues shall be and remain permanently funded, the interest only to be used for current expenses.

Any Fellow not previously subject to Annual Dues who takes up his residence within fifty miles of Boston, shall pay to the Treasurer within three months thereafter Annual Dues for the current year, failing which his Fellowship shall cease ; but the Council may suspend the provisions of this Article for a reasonable time.

Only Fellows who pay Annual Dues or have commuted them may hold office in the Academy or serve on the Standing Committees or vote at meetings.

ARTICLE 6. Fellows who pay or have commuted the Annual Dues and Foreign Honorary Members shall be entitled to receive gratis one copy of all Publications of the Academy issued after their election.

See Chap. x. art. 2.

ARTICLE 7. Diplomas signed by the President and the Vice-President of the Class to which the member belongs, and countersigned by the Secretaries, shall be given to all the Fellows and Foreign Honorary Members.

ARTICLE 8. If, in the opinion of a majority of the entire Council, any Fellow or Foreign Honorary Member shall have rendered himself unworthy of a place in the Academy, the Council shall recommend to the Academy the termination of his membership; and if three fourths of the Fellows present, out of a total attendance of not less than fifty, at a Stated Meeting, or at a Special Meeting called for the purpose, shall adopt this recommendation, his name shall be stricken from the Roll.

See Chap. iii.; chap. vi. art. 1; chap. ix. art. 1, 7; chap. x. art. 2.

CHAPTER III

ELECTION OF FELLOWS AND FOREIGN HONORARY MEMBERS

ARTICLE 1. Elections of Fellows and Foreign Honorary Members shall be by ballot, and only at the Stated Meetings in January and May. Three fourths of the ballots cast, and not less than twenty, must be affirmative to effect an election.

ARTICLE 2. Candidates must be proposed in writing by two Fellows of the Section for which the proposal is made. These signed nominations shall be sent to the Corresponding Secretary and shall be retained by him until the fifteenth of the following October or February, as the case may be, when all nominations then in his hands shall be immediately sent in printed form to every Fellow having the right to vote, with the names of the proposers in each case, and with a request to send to the Corresponding Secretary written comments on these names not later than the fifth of November or the fifth of March respectively.

All the signed nominations, with the comments thereon, received up to the fifth of November or the fifth of March shall be sent at once to the appropriate Class Committees, which shall report their decisions to the Council at a special meeting to be called to consider nominations, not later than two days before the meeting of the Academy in December and April respectively.

ARTICLE 3. All nominations approved by the Council shall be read to the Academy at a meeting in December or in April, or be sent to the

Fellows in print with the official notice of the meeting, and shall then be posted in the Hall of the Academy until the balloting.

Not later than two weeks after any nomination is reported to the Academy, the Corresponding Secretary shall send to every Fellow having the right to vote a brief printed account of the nominee.

See Chap. ii. ; chap. vi. art. 1 ; chap. ix. art. 1.

CHAPTER IV

OFFICERS

ARTICLE 1. The Officers of the Academy shall be a President (who shall be Chairman of the Council), three Vice-Presidents (one from each Class), a Corresponding Secretary (who shall be Secretary of the Council), a Recording Secretary, a Treasurer, and a Librarian, all of whom shall be elected by ballot at the Annual Meeting, and shall hold their respective offices for one year, and until others are duly chosen and installed.

There shall be also twelve Councillors, one from each Section of each Class. At the Annual Meeting in 1912 three Councillors, one from each Class, shall be elected by ballot to serve for one year, three for two years, three for three years, and three for four years. At each subsequent Annual Meeting three Councillors, one from each Class, shall be elected by ballot to serve for the full term of four years and until others are duly chosen and installed. The same Fellow shall not be eligible for two successive terms.

The Councillors, with the other officers previously named, shall constitute the Council.

See Chap. x. art. 1.

ARTICLE 2. If any office shall become vacant during the year, the vacancy may be filled by the Council in its discretion for the unexpired term.

ARTICLE 3. At the Stated Meeting in March, the President shall appoint a Nominating Committee of three Fellows having the right to vote, one from each Class. This Committee shall prepare a list of nominees for the several offices to be filled, and for the Standing Committees, and cause it to be sent to the Recording Secretary not later than four weeks before the Annual Meeting.

ARTICLE 4. Independent nominations for any office, if signed by at least twenty Fellows having the right to vote, and received by the Recording Secretary not less than ten days before the Annual Meeting, shall be inserted, together with the list of nominees prepared by the Nominating Committee, in the call therefor, and shall be mailed to all the Fellows.

See Chap. vi. art. 2.

ARTICLE 5. The Recording Secretary shall prepare for use in voting at the Annual Meeting a ballot containing the names of all persons duly nominated for office.

CHAPTER V

THE PRESIDENT

ARTICLE 1. The President, or in his absence the senior Vice-President present (seniority to be determined by length of continuous fellowship in the Academy), shall preside at all meetings of the Academy. In the absence of all these officers, a Chairman of the meeting shall be chosen by ballot.

ARTICLE 2. Unless otherwise ordered, all Committees which are not elected by ballot shall be appointed by the presiding officer.

ARTICLE 3. Any deed or writing to which the Corporate Seal is to be affixed, except leases of real estate, shall be executed in the name of the Academy by the President or, in the event of his death, absence, or inability, by one of the Vice-Presidents, when thereto duly authorized.

See Chap. ii. art. 7; chap. iv. art. 1, 3; chap. vi. art. 2; chap. vii. art. 1; chap. ix. art. 6; chap. x. art. 1, 2; chap. xi. art. 1.

CHAPTER VI

THE SECRETARIES

ARTICLE 1. The Corresponding Secretary shall conduct the correspondence of the Academy and of the Council, recording or making an entry of all letters written in its name, and preserving for the files all official papers which may be received. At each meeting of the Council he shall present the communications addressed to the Academy which

have been received since the previous meeting, and at the next meeting of the Academy he shall present such as the Council may determine.

He shall notify all persons who may be elected Fellows or Foreign Honorary Members, send to each a copy of the Statutes, and on their acceptance issue the proper Diploma. He shall also notify all meetings of the Council; and in case of the death, absence, or inability of the Recording Secretary he shall notify all meetings of the Academy.

Under the direction of the Council, he shall keep a List of the Fellows and Foreign Honorary Members, arranged in their several Classes and Sections. It shall be printed annually and issued as of the first day of July.

See Chap. ii. art. 7; chap. iii. art. 2, 3; chap. iv. art. 1; chap. ix. art. 6; chap. x. art. 1; chap. xi. art. 1.

ARTICLE 2. The Recording Secretary shall have the custody of the Charter, Corporate Seal, Archives, Statute-Book, Journals, and all literary papers belonging to the Academy.

Fellows borrowing such papers or documents shall receipt for them to their custodian.

The Recording Secretary shall attend the meetings of the Academy and keep a faithful record of the proceedings with the names of the Fellows present; and after each meeting is duly opened, he shall read the record of the preceding meeting.

He shall notify the meetings of the Academy to each Fellow by mail at least seven days beforehand, and in his discretion may also cause the meetings to be advertised; he shall apprise Officers and Committees of their election or appointment, and inform the Treasurer of appropriations of money voted by the Academy.

He shall post in the Hall a list of the persons nominated for election into the Academy; and after all elections, he shall insert in the Records the names of the Fellows by whom the successful candidates were nominated.

In the absence of the President and of the Vice-Presidents he shall, if present, call the meeting to order, and preside until a Chairman is chosen.

See Chap. i.; chap. ii. art. 7; chap. iv. art. 3, 4, 5; chap. ix. art. 6; chap. x. art. 1, 2; chap. xi. art. 1, 3.

ARTICLE 3. The Secretaries, with the Chairman of the Committee of Publication, shall have authority to publish such of the records of the meetings of the Academy as may seem to them likely to promote its interests.

CHAPTER VII

THE TREASURER AND THE TREASURY

ARTICLE 1. The Treasurer shall collect all money due or payable to the Academy, and all gifts and bequests made to it. He shall pay all bills due by the Academy, when approved by the proper officers, except those of the Treasurer's office, which may be paid without such approval; in the name of the Academy he shall sign all leases of real estate; and, with the written consent of a member of the Committee on Finance, he shall make all transfers of stocks, bonds, and other securities belonging to the Academy, all of which shall be in his official custody.

He shall keep a faithful account of all receipts and expenditures, submit his accounts annually to the Auditing Committee, and render them at the expiration of his term of office, or whenever required to do so by the Academy or the Council.

He shall keep separate accounts of the income of the Rumford Fund, and of all other special Funds, and of the appropriation thereof, and render them annually.

His accounts shall always be open to the inspection of the Council.

ARTICLE 2. He shall report annually to the Council at its March meeting on the expected income of the various Funds and from all other sources during the ensuing financial year. He shall also report the names of all Fellows who may be then delinquent in the payment of their Annual Dues.

ARTICLE 3. He shall give such security for the trust reposed in him as the Academy may require.

ARTICLE 4. With the approval of a majority of the Committee on Finance, he may appoint an Assistant Treasurer to perform his duties, for whose acts, as such assistant, he shall be responsible; or, with like approval and responsibility, he may employ any Trust Company doing business in Boston as his agent for the same purpose, the compensation of such Assistant Treasurer or agent to be fixed by the Committee on Finance and paid from the funds of the Academy.

ARTICLE 5. At the Annual Meeting he shall report in print all his official doings for the preceding year, stating the amount and condition

of all the property of the Academy entrusted to him, and the character of the investments.

ARTICLE 6. The Financial Year of the Academy shall begin with the first day of April.

ARTICLE 7. No person or committee shall incur any debt or liability in the name of the Academy, unless in accordance with a previous vote and appropriation therefor by the Academy or the Council, or sell or otherwise dispose of any property of the Academy, except cash or invested funds, without the previous consent and approval of the Council.

See Chap. ii. art. 4, 5; chap. vi. art. 2; chap. ix. art. 6; chap. x. art. 1, 2, 3; chap. xi. art. 1.

CHAPTER VIII

THE LIBRARIAN AND THE LIBRARY

ARTICLE 1. The Librarian shall have charge of the printed books, keep a correct catalogue thereof, and provide for their delivery from the Library.

At the Annual Meeting, as Chairman of the Committee on the Library, he shall make a Report on its condition.

ARTICLE 2. In conjunction with the Committee on the Library he shall have authority to expend such sums as may be appropriated by the Academy for the purchase of books, periodicals, etc., and for defraying other necessary expenses connected with the Library.

ARTICLE 3. All books procured from the income of the Rumford Fund or of other special Funds shall contain a book-plate expressing the fact.

ARTICLE 4. Books taken from the Library shall be receipted for to the Librarian or his assistant.

ARTICLE 5. Books shall be returned in good order, regard being had to necessary wear with good usage. If any book shall be lost or injured, the Fellow to whom it stands charged shall replace it by a new volume or by a new set, if it belongs to a set, or pay the current price thereof to the Librarian, whereupon the remainder of the set, if any,

shall be delivered to the Fellow so paying, unless such remainder be valuable by reason of association.

ARTICLE 6. All books shall be returned to the Library for examination at least one week before the Annual Meeting.

ARTICLE 7. The Librarian shall have the custody of the Publications of the Academy. With the advice and consent of the President, he may effect exchanges with other associations.

See Chap. ii. art. 6 ; chap. x. art. 1, 2.

CHAPTER IX

THE COUNCIL

ARTICLE 1. The Council shall exercise a discreet supervision over all nominations and elections to membership, and in general supervise all the affairs of the Academy not explicitly reserved to the Academy as a whole or entrusted by it or by the Statutes to standing or special committees.

It shall consider all nominations duly sent to it by any Class Committee, and present to the Academy for action such of these nominations as it may approve by a majority vote of the members present at a meeting, of whom not less than seven shall have voted in the affirmative.

With the consent of the Fellow interested, it shall have power to make transfers between the several Sections of the same Class, reporting its action to the Academy.

See Chap. iii. art. 2, 3 ; chap. x. art. 1.

ARTICLE 2. Seven members shall constitute a quorum.

ARTICLE 3. It shall establish rules and regulations for the transaction of its business, and provide all printed and engraved blanks and books of record.

ARTICLE 4. It shall act upon all resignations of officers, and all resignations and forfeitures of fellowship ; and cause the Statutes to be faithfully executed.

It shall appoint all agents and subordinates not otherwise provided for by the Statutes, prescribe their duties, and fix their compensation.

They shall hold their respective positions during the pleasure of the Council.

ARTICLE 5. It may appoint, for terms not exceeding one year, and prescribe the functions of, such committees of its number, or of the Fellows of the Academy, as it may deem expedient, to facilitate the administration of the affairs of the Academy or to promote its interests.

ARTICLE 6. At its March meeting it shall receive reports from the President, the Secretaries, the Treasurer, and the Standing Committees, on the appropriations severally needed for the ensuing financial year. At the same meeting the Treasurer shall report on the expected income of the various Funds and from all other sources during the same year.

At the Annual Meeting it shall submit to the Academy, for its action, a report recommending the appropriations which in the opinion of the Council should be made.

On the recommendation of the Council, special appropriations may be made at any Stated Meeting of the Academy, or at a Special Meeting called for the purpose.

See Chap. x. art. 3.

ARTICLE 7. After the death of a Fellow or Foreign Honorary Member, it shall appoint a member of the Academy to prepare a Memoir for publication in the Proceedings.

ARTICLE 8. It shall report at every meeting of the Academy such business as it may deem advisable to present.

See Chap. ii. art. 4, 5, 8; chap. iv. art. 1, 2; chap. vi. art. 1; chap. vii. art. 1; chap. xi. art. 1, 4.

CHAPTER X

STANDING COMMITTEES

ARTICLE 1. The Class Committee of each Class shall consist of the Vice-President, who shall be chairman, and the four Councillors of the Class, together with such other officer or officers annually elected as may belong to the Class. It shall consider nominations to Fellowship in its own Class, and report in writing to the Council such as may receive at a Class Committee Meeting a majority of the votes cast, provided at least three shall have been in the affirmative.

See Chap. iii. art. 2.

ARTICLE 2. At the Annual Meeting the following Standing Committees shall be elected by ballot to serve for the ensuing year :

(i) *The Committee on Finance*, to consist of three Fellows, who, through the Treasurer, shall have full control and management of the funds and trusts of the Academy, with the power of investing the funds and of changing the investments thereof in their discretion.

See Chap. iv. art. 3 ; chap. vii. art. 1, 4 ; chap. ix. art. 6.

(ii) *The Rumford Committee*, to consist of seven Fellows, who shall report to the Academy on all applications and claims for the Rumford Premium. It alone shall authorize the purchase of books, publications and apparatus at the charge of the income from the Rumford Fund, and generally shall see to the proper execution of the trust.

See Chap. iv. art. 3 ; chap. ix. art. 6.

(iii) *The Cyrus Moors Warren Committee*, to consist of seven Fellows, who shall consider all applications for appropriations from the income of the Cyrus Moors Warren Fund, and generally shall see to the proper execution of the trust.

See Chap. iv. art. 3 ; chap. ix. art. 6.

(iv) *The Committee of Publication*, to consist of three Fellows, one from each Class, to whom all communications submitted to the Academy for publication shall be referred, and to whom the printing of the Proceedings and the Memoirs shall be entrusted.

It shall fix the price at which the Publications shall be sold ; but Fellows may be supplied at half price with volumes which may be needed to complete their sets, but which they are not entitled to receive gratis.

Two hundred extra copies of each paper accepted for publication in the Proceedings or the Memoirs shall be placed at the disposal of the author without charge.

See Chap. iv. art. 3 ; chap. vi. art. 1, 3 ; chap. ix. art. 6.

(v) *The Committee on the Library*, to consist of the Librarian, *ex officio*, as Chairman, and three other Fellows, one from each Class, who shall examine the Library and make an annual report on its condition and management.

See Chap. iv. art. 3 ; chap. viii. art. 1, 2 ; chap. ix. art. 6.

(vi) *The House Committee*, to consist of three Fellows, who shall have charge of all expenses connected with the House, including the general expenses of the Academy not specifically assigned to the care of other Committees or Officers.

See Chap. iv. art. 3 ; chap. ix. art. 6.

(vii) *The Committee on Meetings*, to consist of the President, the Recording Secretary, and three other Fellows, who shall have charge of plans for meetings of the Academy.

See Chap. iv. art. 3 ; chap. ix. art. 6.

(viii) *The Auditing Committee*, to consist of two Fellows, who shall audit the accounts of the Treasurer, with power to employ an expert and to approve his bill.

See Chap. iv. art. 3 ; chap. vii. art. 1 ; chap. ix. art. 6.

ARTICLE 3. The Standing Committees shall report annually to the Council in March on the appropriations severally needed for the ensuing financial year ; and all bills incurred on account of these Committees, within the limits of the several appropriations made by the Academy, shall be approved by their respective Chairmen.

In the absence of the Chairman of any Committee, bills may be approved by any member of the Committee whom he shall designate for the purpose.

See Chap. vii. art. 1, 7 ; chap ix. art. 6.

CHAPTER XI

MEETINGS, COMMUNICATIONS, AND AMENDMENTS

ARTICLE 1. There shall be annually four Stated Meetings of the Academy, namely, on the second Wednesday of January, March, May, and October. Only at these meetings, or at adjournments thereof regularly notified, or at Special Meetings called for the purpose, shall appropriations of money be made, or amendments of the Statutes or Standing Votes be effected.

The Stated Meeting in May shall be the Annual Meeting of the Corporation.

Special Meetings shall be called by either of the Secretaries at the request of the President, of a Vice-President, of the Council, or of ten

Fellows having the right to vote; and notifications thereof shall state the purpose for which the meeting is called.

A meeting for receiving and discussing literary or scientific communications may be held on the second or the fourth Wednesday, or both, of each month not appointed for Stated Meetings, excepting July, August, and September; but no business shall be transacted at any meeting which may be held on the fourth Wednesday.

ARTICLE 2. Twenty Fellows having the right to vote shall constitute a quorum for the transaction of business at Stated or Special Meetings. Fifteen Fellows shall be sufficient to constitute a meeting for literary or scientific communications and discussions.

ARTICLE 3. Upon the request of the presiding officer or the Recording Secretary, any motion or resolution offered at any meeting shall be submitted in writing.

ARTICLE 4. No report of any paper presented at a meeting of the Academy shall be published by any Fellow without the consent of the author; and no report shall in any case be published by any Fellow in a newspaper as an account of the proceedings of the Academy without the previous consent and approval of the Council.

ARTICLE 5. No Fellow shall introduce a guest at any meeting of the Academy until after the business has been transacted, and especially until after nominations to Fellowship have been read and the result of the balloting for candidates has been declared.

ARTICLE 6. The Academy shall not express its judgment on literary or scientific memoirs or performances submitted to it, or included in its Publications.

ARTICLE 7. All proposed Amendments of the Statutes shall be referred to a committee, and on its report, at a subsequent Stated Meeting or at a Special Meeting called for the purpose, two thirds of the ballots cast, and not less than twenty, must be affirmative to effect enactment.

ARTICLE 8. Standing Votes may be passed, amended, or rescinded at a Stated Meeting, or at a Special Meeting called for the purpose, by a vote of two thirds of the members present. They may be suspended by a unanimous vote.

See Chap. ii. art. 5, 8; chap. iii.; chap. iv. art. 3, 4, 5; chap. v. art. 1; chap. vi. art. 1, 2; chap. ix. art. 8.

The following communication was given:—

"A biographical notice of Dr. Henry Pickering Bowditch,"
by Professor W. B. Cannon.

The following paper was presented by title:—

"An Electromagnetic Theory of Gravitation," by D. L.
Webster. Presented by B. O. Peirce.

One thousand and ninth Meeting.

DECEMBER 13, 1911.

The Academy met at the Museum of Fine Arts, Huntington Avenue.

The PRESIDENT in the chair.

There were eighteen Fellows and three guests present.

The Corresponding Secretary read the following letters:—
from Henry B. Bigelow and Elmer E. Southard, accepting Fellowship; from the New Hampshire Historical Society, inviting the Academy to be represented at the dedication of its Library building.

The PRESIDENT read the following letter from Mrs. George R. Agassiz.

76 MOUNT VERNON STREET, December 11, 1911.

To Professor JOHN TROWBRIDGE,

President of the American Academy of Sciences:

My dear Mr. TROWBRIDGE,

May I offer the American Academy, through you, a bas-relief of Mr. Alexander Agassiz by Bela Pratt? It is life size, and most satisfactory to us all, and I hope you will find it so.

If it is accepted by the Academy, I should consider it as a favor to me, if Mr. Pratt may be allowed to confer with Mr. Page as to the placing of this bas-relief.

Yours very sincerely,

MABEL S. AGASSIZ.

It was

Voted, To accept the gift from Mrs. Agassiz, and the Secretary was instructed to acknowledge it.

The following communication was given by Dr. Fairbanks:—

"Some Aspects of the Fine Arts."

One thousand and tenth Meeting.

JANUARY 10, 1912. — STATED MEETING.

The Academy met in Ellis Hall.

The PRESIDENT in the chair.

There were twenty-eight Fellows present.

The following letters were presented by the Corresponding Secretary: — from Edwin B. Wilson, accepting Fellowship; notices of the deaths of Sir J. D. Hooker and J. B. E. Bornet; a preliminary notice of the International Congress of Anthropology and Prehistoric Archaeology, to be held at Genoa, in September, 1912.

The President announced the following deaths: — Dr. Algernon Coolidge, Fellow in Class II., Section 1; Sir Joseph D. Hooker, and J. B. E. Bornet, Foreign Honorary Members in Class II., Section 2.

The following report of the Building Committee was read by the chairman: —

At the Annual Meeting of the Academy, it was voted that the President appoint a building committee composed of the chairman of the house committee, the librarian, and such other persons as they should add to their number to have oversight of the carrying on of the building, and to decide such matters of detail in connection therewith, as might come up. The President accordingly appointed Dr. Louis Bell, in addition to the two officials above named, to whom was subsequently added Dr. H. M. Goodwin, who with the President constituted the committee. The committee held several meetings during the summer, and considered a number of matters of detail. Several conferences were held by representatives of the committee with the architect, who seemed very averse to treating with the committee or taking any of their suggestions. The Agassiz heirs were also consulted and finally agreed to change the elevator which had been ordered to a self-acting one. The committee feel bound to state that this is the chief tangible result that their labors have accomplished. They have been unable until very recently to secure access to the stack so that it has been impossible to consult books or records, and many of their recommendations have not been carried out. It was the opinion of the committee that the reading room should have

low book shelves entirely around it, which would permit placing in the reading room the recent volumes of all the transactions of the learned societies now in our book stack. It was also our opinion that convenience required a door opening directly from the librarian's room into the reading room. This, however, the Messrs. Agassiz refused to allow. We do not think that the shelving should have glass doors nor that five sofas are desirable, believing that the room should have the requisites of a reading room rather than of a club room. The committee hope that the members of the Academy may express their opinion on this point, and that either the functions of the committee may be determined more definitely or that the committee may be discharged.

Respectfully submitted,

A. G. WEBSTER.

After discussion, on the motion of A. C. Lane, it was

Voted, 1. That the President notify the architects of the names of the Building Committee, and that they are expected to carry out the wishes of the same, so far as is compatible with the wishes of the Agassiz heirs.

2. That the Building Committee be requested to continue.

It was also

Voted, That the Report of the Building Committee be accepted.

The following communication was given:—

"The Fall of a Meteorite." By Dr. Elihu Thomson.

The following paper was presented by title:—

"A Revision of the Atomic Weight of Phosphorus. Second Paper.—The Analysis of Phosphorus Tribromide." By G. P. Baxter, C. J. Moore, and A. C. Boylston.

One thousand and eleventh Meeting.

JANUARY 17, 1912. — SPECIAL MEETING.

The Academy met at Ellis Hall, called by the President to consider the furnishing of the new building.

The PRESIDENT in the chair.

There were twenty-three Fellows present.

In the absence of the Recording Secretary, the Corresponding Secretary acted in his place.

The President stated the object of the meeting and gave his views of the matter in question.

A representative of the firm of Page and Frothingham, the architects of the new building, was present, and after discussion the Academy took a recess of five minutes to examine the plan of the Reading-room which he presented.

After business was resumed, on motion of the Treasurer, it was

Voted, That in the opinion of the Academy it is desirable that the plan of furnishing the Academy building as suggested by the Agassiz heirs through the architects be carried out. This was passed by a vote of 13 to 6.

At 9.45 the meeting adjourned.

One thousand and twelfth Meeting.

FEBRUARY 14, 1912.

The Academy met in Ellis Hall.

The PRESIDENT in the chair.

There were thirty-three Fellows and one guest present.

The Corresponding Secretary presented the following communications:—letters from Forris Jewett Moore, accepting Fellowship; and from Heinrich Oscar Hofman, resigning Fellowship; an invitation from the Royal Society of London, to send a delegate to the celebration of its 250th anniversary, in July, 1912; an invitation from the American Philosophical Society, to send a delegate to its Annual General Meeting, April 18–20, 1912; an invitation from the Academy of Natural Sciences of Philadelphia, to send a representative to the celebration of its centenary anniversary, March 19–21, 1912; a notice of the eighth International Congress of Applied Chemistry, to be held in Washington and New York, in September, 1912, enclosing blanks for application for Membership.

The President announced the death of Dr. O. F. Wadsworth, Fellow in Class II., Section 4, and of Joseph Lister, Foreign Honorary Member in Class II., Section 4.

The President was authorized to appoint a delegate to the celebration of the 250th anniversary of the Royal Society, London; to the celebration of the centenary anniversary of the

Academy of Natural Science of Philadelphia, and also to the Annual General Meeting of the American Philosophical Society.

On motion of Mr. C. P. Bowditch, the following resolution was passed, and the Corresponding Secretary requested to send copies to the Carnegie Institution, the Smithsonian Institution, and the Library of Congress:—

Whereas, In 1908, the Carnegie Institution published the "Handbook of Learned Societies and Institutions in America" which had been compiled by Mr. J. D. Thompson, of the Library of Congress,

Whereas, This book is of inestimable value to Librarians and to all interested in a knowledge of the history, or publications of Societies, and

Whereas, Material has been collected for a Handbook relating to Societies of the Old World, which is now kept on file in the Library of Congress, it is therefore

Voted, That the American Academy of Arts and Sciences request that this unpublished material may be published with as little delay as possible, if not by the Carnegie Institution, then by the Library of Congress or the Smithsonian Institution.

On motion of Professor Lanman, it was

Voted, That the Chairman of the Committee of Publication be requested to see that the bound volumes of the Proceedings be lettered on the back with the date as well as the volume number.

The Secretary of the Council announced that at his own request, Dr. Harold C. Ernst had been transferred from Class II., Section 3, to Class II., Section 4.

The following communications were given:—

Dr. F. H. Williams. "A Biographical Notice of Dr. Frederick I. Knight."

Mr. Charles P. Bowditch. "The Results of the American Occupation of the Philippines."

The following papers were presented by titles:—

"Electrical Properties of Crystals. Capacity in Carborundum." By G. W. Pierce and R. D. Evans.

"Pali Writing-machines — a Study for a Rational Keyboard." By C. R. Lanman.

"An Algebra of Plane Projective Geometry." By H. B. Phillips and C. L. E. Moore. Presented by H. W. Tyler.

One thousand and thirteenth Meeting.

MARCH 13, 1912. — STATED MEETING.

The Academy met at the X-ray department of the Boston City Hospital, Harrison Avenue and Massachusetts Avenue.

The PRESIDENT in the chair.

There were present twenty-six Fellows and two guests.

The Corresponding Secretary presented the following communications: from Otto Folin, Roscoe Pound, Charles P. Steinmetz accepting Fellowship; from R. S. Woodward, of the Carnegie Institution, Charles D. Walcott, of the Smithsonian Institution, in reply to Resolution of the Academy sent to them.

The following deaths were announced by the Chair: —

Charles Robert Sanger, Class I., Section 3; Edward Henry Hall, Class III., Section 4; Henry Williamson Haynes, Class III., Section 2, Librarian from 1886 to 1899.

The Corresponding Secretary reported that the Council had voted to invite Doctor H. P. Walcott to deliver the dedicatory address at the opening of the new Academy Building, and had requested the President, with two other members to be selected by himself, to serve as a Committee of Arrangements for the opening of the new building.

On the recommendation of the Council it was

Voted, To appropriate five hundred (\$500) dollars from the income of the Publication Fund for use of the Publication Committee.

On the recommendation of the Council it was

Voted, To appropriate two hundred (\$200) dollars from the income of the General Fund for the use of the House Committee.

The Council proposed the following amendment to the Statutes: —

Omit paragraph 2, of Article 6, of Chapter IX., and insert in its place the following:

"A report from the Council shall be submitted to the Academy, for action at the March meeting, recommending the appropriations which in the opinion of the Council should be made."

The above proposed amendment to the Statutes was referred to a Committee consisting of Messrs. Bowditch and Edes, with a request to report at the Annual meeting in May.

On the recommendation of the Council it was

Voted, That in the opinion of the Academy it is desirable that twenty-five new Fellows, living within fifty miles of Boston, should be elected in May, in addition to such a number as is needed to fill vacancies occasioned by deaths or resignations since January 1, 1912.

The President appointed the following gentlemen to serve as Nominating Committee: —

Henry Lefavour, of Class I.

William T. Sedgwick, of Class II. (Chairman).

George L. Kittredge, of Class III.

Professor Kittredge having declined service on the Committee, Mr. Worthington C. Ford was appointed by the President in his stead.

The following communication was given: —

Dr. Francis H. Williams. "X-rays and Radium," with demonstrations.

The following paper was presented by title: —

"On the Ultra Violet Radiation of Practical Illuminants."
By Louis Bell.

One thousand and fourteenth Meeting.

APRIL 10, 1912.

The Academy met at Ellis Hall.

The PRESIDENT in the chair.

There were twenty-two Fellows present.

The Corresponding Secretary presented the following correspondence: — an invitation from the Trustees and Faculty of Princeton University requesting a delegate from the Academy at the inauguration of John Grier Hibben, as President of the University; from the Secretary of the third International Congress of Archaeology, to be held in Rome, October 9-16, 1912, requesting delegates; from the Organizing Committee of the fourth International Congress of Religions, to be held September 9-13, 1912, at Leiden.

The President was authorized to appoint delegates to represent the Academy at the inauguration of the new President at Princeton, and at the Congresses to be held at Rome and Leiden.

The President announced the death of A. Lawrence Rotch, Class I., Section 1, Librarian of the Academy since 1899.

At the suggestion of the President, it was

Voted, To thank the Massachusetts Historical Society for their very generous hospitality in allowing the Academy the use of Ellis Hall during the year.

The following paper was presented by title:—

“New or Critical Laboulbeniales from the Argentine.” By Roland Thaxter.

The following communication was given:—

“Recent Applications of the Gyroscope,” with lantern illustrations. By Arthur G. Webster.

One thousand and fifteenth Meeting.

MAY 8, 1912. — ANNUAL MEETING.

The Academy met for the first time in its new building, erected on the site of its former house and the adjoining lot. Numbers 28 and 26 Newbury Street.

The PRESIDENT in the chair.

There were forty-four Fellows present.

The Corresponding Secretary presented the following correspondence:—from the Regents and Secretary of the Smithsonian Institution, an invitation to view the art objects of the Freer Collection; from the chairman of the Organizing Committee of the Eighteenth International Congress of Americanists, requesting a representative of the Academy to attend the session in London, May 27–June 1; from the President of the Association des Ingenieurs Electriciens, giving the conditions of the competition for the George Montefiore prize.

The Chair announced the deaths of the following Fellows:—George Davidson, Class I., Section 1; George Jarvis Brush, Class II., Section 1.

The following report of the Council was read:—

Since the last report of the Council, there have been reported the deaths of ten Fellows:—Algernon Coolidge, O. F. Wadsworth, S. H. Scudder, H. W. Haynes, C. R. Sanger, Edward H. Hall, A. Lawrence Rotch, C. G. Pringle, G. J. Brush, and George Davidson; and of three Foreign Honorary Members:—Sir Joseph Hooker, Lord Lister, and J. B. E. Bornet.

One Fellow has resigned:—H. O. Hofman.

Thirty-four Fellows have been elected, of which number one declined Fellowship, and one has not yet accepted, as he is out of the country.

The roll now includes (counting the one who has not yet accepted) 272 Fellows and 52 Foreign Honorary Members.

The annual report of the Treasurer was read, of which the following is an abstract:—

GENERAL FUND.

Receipts.

Balance, May 1, 1911	\$438.14	
Investments	3,459.96	
Assessments	2,110.00	
Admission fees	230.00	
Use of water	19.77	\$6,257.87

Expenditures.

Expense of House	\$815.14	
Expense of Library	2,388.12	
Expense of Meetings	171.69	
Treasurer	143.57	
General expenses of Society	473.96	
Interest on bonds	2.91	
Income transferred to principal	227.10	\$4,222.49
Balance, April 1, 1912		2,035.38
		<u>\$6,257.87</u>

RUMFORD FUND.

Receipts.

Balance, May 1, 1911	\$1,498.10	
Investments	2,850.93	
Sale of Publications	5.00	\$4,354.03

<i>Expenditures.</i>		
Research	\$1,400.00	
Books, periodicals, and binding	221.70	
Publication	756.53	
Medals	400.00	
Sundries	40.85	
Income transferred to principal	147.03	\$2,966.11
Balance, April 1, 1912		<u>1,307.92</u>
		\$4,354.03

C. M. WARREN FUND.

<i>Receipts.</i>		
Balance, May 1, 1911	\$897.72	
Investments	620.60	\$1,518.32

<i>Expenditures.</i>		
Research	\$750.00	
Vault rent, part	4.00	
Interest on bonds	70.14	
Income transferred to principal	16.84	
Charged to cancel premium on bonds	300.00	\$1,140.98
Balance, April 1, 1912		<u>377.34</u>
		\$1,518.32

PUBLICATION FUND.

<i>Receipts.</i>		
Balance, May 1, 1911	\$1,066.18	
Appleton Fund investments	665.56	
Centennial Fund investments	2,076.41	
Sale of Publications	49.04	\$3,857.19

<i>Expenditures.</i>		
Publication	\$2,981.08	
Vault rent, part	12.50	
Income transferred to principal	148.26	\$3,141.84
Balance, April 1, 1912		<u>715.35</u>
		\$3,857.19

The following reports were also presented: —

REPORT OF THE LIBRARY COMMITTEE.

Owing to the death of Mr. A. Lawrence Rotch, the usual report of the Librarian devolves upon the Library Committee; and the Committee

has also lost by death Mr. Henry W. Haynes. Mr. Rotch served as Librarian from May 10, 1899, until his death, April 7, 1912. Mr. Haynes died February 16, 1912; he had been a member of the Library Committee since May, 1899, and had previously been the Librarian of the Academy for thirteen years.

During the year the Library has been conducted at the rooms temporarily occupied by the Academy at 711 Boylston Street. The Newbury Street book stack was accessible only from November, 1911, and during this time 62 books were borrowed by 10 persons.

Upon the completion of the new building in April, 1912, the current numbers of serials and of the publications of institutions were removed to the Librarian's room and the pamphlets to the gallery of the same room; the duplicate books have been placed in the stack room on the fourth floor, and the stock of the publications of the Academy in the stack room in the basement.

725 volumes have been placed on the shelves since the last report; this includes 626 volumes received by gift and exchange, 81 volumes purchased from the income of the General Fund, and 18 volumes purchased from the income of the Rumford Fund.

The number of volumes now in the library is 32,068.

578 volumes have been bound, 147 have been stamped and plated at a cost of \$656.25.

The expenses charged to the Library are:—Miscellaneous (including \$20.13 for cataloguing), \$382.29; Binding, \$597.80 General, and \$58.45 Rumford, Funds; Purchase of periodicals and books, \$491.37 General, and \$163.25 Rumford, Funds.

H. M. GOODWIN of Class I,
SAMUEL HENSHAW of Class II.,
Committee.

May 8, 1912.

REPORT OF THE RUMFORD COMMITTEE.

During the present year appropriations in aid of research have been made by the Committee as follows:—

May 10, 1911 (evening meeting), to Professor Daniel F. Comstock, in aid of his research on the effect of motion of the source on the velocity of light \$150

Nov. 8, 1911, to Mr. Frank W. Very, in aid of his research on the intensity of spectrum lines (additional) 150

To Professor John Trowbridge, in aid of the researches of Mr. Harvey C. Hayes in thermo-electricity 300

To Professor Robert W. Wood, in aid of his researches on the optical properties of vapors and long heat waves (additional)	150
Dec. 13, 1911, to Professor Arthur L. Clark, in aid of his research on the physical properties of vapors in the neighborhood of the critical point (additional)	250
Feb. 14, 1912, to Professor Gilbert N. Lewis, in furtherance of his researches on the free-energy changes in chemical reactions (additional)	250

Since the last annual meeting of the Academy, papers have been published in the Proceedings at the expense of the Rumford Fund, wholly or in part, as follows:—

Hayes, Harvey C. — An Investigation of the Errors in Cooling Curves and Methods for Avoiding these Errors; also, a new Form of Crucible.

Richards, Theodore W., and Kelley, George L. — The Transition Temperatures of Sodium Chromate as Convenient Fixed Points in Thermometry.

Bridgman, Percy W. — Mercury, Liquid and Solid, under Pressure.

Bridgman, Percy W. — Water, in the Liquid and Five Solid Forms, under Pressure.

At the meeting of March 13, 1912, it was voted to authorize the Chairman to proceed to the printing of the Supplement to the "Rumford Fund" pamphlet, the copy for which is now complete.

The Committee has succeeded in locating all the Rumford medals which have been awarded, and has procured casts or photographs from which replicas can be made at any time.

At the meeting of Nov. 8, 1911, the Committee made a change in the requirements as to the publication of papers embodying the results of researches aided from the Rumford Fund. The rule as modified now reads, "Persons carrying on researches with the aid of the Rumford Fund should submit to the Academy an account of their researches not less complete than that published elsewhere. These researches may be published in any place or form, with the proviso that due recognition be made of the grant."

At the meeting of the Committee held on February 14, 1912, it was unanimously voted for the first time, and at the meeting held on March 13 it was unanimously voted for the second time, to recommend to the Academy the award of the Rumford Premium to Frederic Eugene Ives for his Optical Inventions, particularly in Color Photography and Photo-engraving.

CHARLES R. CROSS, *Chairman*.

May 8, 1912.

REPORT OF THE C. M. WARREN COMMITTEE.

The C. M. Warren Committee beg to report that during the past year grants have been made as follows:—

To Dr. S. F. Acree, Johns Hopkins University, for the study of the physical and chemical properties of pure ethyl alcohol . . .	\$200
To Professor H. G. Byers, University of Washington, for work upon passivity of metals	250
To Professor W. D. Harkins, University of Montana, for work upon the energy relations in a surface between two liquid phases . . .	300
To Dr. Latham Clark, Harvard University, for work on the paraffin hydrocarbons	150

Reports have been received from the various recipients of the grants from the Warren Fund, indicating the progress which is being made upon the researches not yet completed.

The Committee has suffered a serious loss in the death of Professor Charles R. Sanger, who has for many years taken a marked interest in this work. The members of the Committee desire to record their sense of personal loss which Professor Sanger's death occasions.

H. P. TALBOT, *Chairman*.

May 8, 1912.

REPORT OF THE PUBLICATION COMMITTEE.

Between May 1, 1911, and April 1, 1912, there were published seven numbers of Volume XLVI. (Nos. 19-25) and twenty-one numbers of Volume XLVII. of the Proceedings. The total publication amounted to 1001 pages. The expense of publishing five numbers and a part of a sixth has been assumed by the Rumford Committee.

There was available for the use of the Publication Committee an unexpended balance from last year of \$375.72, an appropriation of \$2500 and an additional appropriation of \$500, and an amount of \$33.99 from the sale of publications up to March 4th—in all \$3409.71 from the Publication Fund and Sales. Bills against this appropriation to the amount of \$2981.08 have been approved by the Chairman of the Publication Committee, and have been submitted to the Treasurer. This leaves an unexpended balance of \$428.63.

Bills aggregating \$756.53, incurred in publishing papers on light and heat, have been referred to the Rumford Committee for payment in accordance with their authorization.

G. W. PIERCE, *Chairman*.

May 8, 1912.

REPORT OF THE HOUSE COMMITTEE.

The rooms at 711 Boylston Street were occupied from March 25, 1911, to April 11, 1912. Out of an appropriation of \$1004.93, the sum of \$858.89 has been spent, leaving a balance of \$146.04.

A. G. WEBSTER, *Chairman*.

May 8, 1912.

FINANCIAL REPORT OF THE COUNCIL.

Estimated Income — May 1, 1912, to April 1, 1913.

GENERAL FUND			\$3,846.84
PUBLICATION FUND	{ Appleton Fund	\$688.06	
	{ Centennial Fund	<u>2,087.66</u>	2,775.72
RUMFORD FUND			2,754.18
WARREN FUND			620.60

Available for Appropriation.

GENERAL FUND	Unappropriated balance.	\$992.76	
	Cash for current expenses.	2,000.00	
	Income, less 5% added to capital	<u>3,645.00</u>	\$6,637.76
PUBLICATION FUND	" " "		2,636.93
RUMFORD FUND	" " "		2,616.47
WARREN FUND	" " "		589.58

Appropriations recommended.

GENERAL FUND	House expenses	\$1,540.00	
	Library expenses	1,466.67	
	Books, periodicals, and binding	1,100.00	
	Expenses of Meetings.	183.33	
	Treasurer's Office	191.67	
	" " Insurance.	450.00	
	General expenses	<u>366.67</u>	\$5,398.34
PUBLICATION FUND.			
	Publication		\$2,500
RUMFORD FUND.			
	Research	\$1,000	
	Periodicals, books, and binding	200	
	Publication	600	
	To be used at discretion of Committee	800	\$2,600
WARREN FUND.			
	Research		\$500

In accordance with the recommendation in the foregoing report it was

Voted, To appropriate for the purposes named the following sums:—

From the General Fund, \$5,398.34.

From the income of the Publication Fund, \$2,500.

From the income of the Rumford Fund, \$2,600.

From the income of the Warren Fund, \$500.

On the recommendation of the Rumford Committee, it was

Voted, To award the Rumford Premium to Frederic Eugene Ives for his Optical Inventions, particularly in Color Photography and Photo-engraving.

The following report was read:—

Your Committee, appointed to consider and report on the Amendment to the Statutes offered at the March meeting, respectfully report,—

They advise the adoption of the Amendment, as follows:—

Omit Paragraph 2 of Article 6 of Chapter IX and insert the following:—

"A Report from the Council shall be submitted to the Academy, for action, at the March meeting, recommending the appropriations which in the opinion of the Council should be made."

CHARLES P. BOWDITCH,

HENRY H. EDES,

Committee.

On the motion of Mr. Bowditch, it was

Voted, To adopt the amendment as reported.

Upon motion of Mr. Lanman, it was

Voted, 1. That among the volumes kept upon the shelves of the Reading Room there be included one set of the publications of this Academy, complete from the beginning; and also any other such volumes as throw light upon the history and activities of the Academy.

2. That the Librarian be requested to give effect to this vote as soon as that may conveniently be done.

The annual election resulted in the choice of the following officers and committees:—

JOHN TROWBRIDGE, *President.*

ELIHU THOMSON, *Vice-President for Class I.*

HENRY P. WALCOTT, *Vice-President for Class II.*

A. LAWRENCE LOWELL, *Vice-President for Class III.*

EDWIN H. HALL, *Corresponding Secretary.*
 WILLIAM WATSON, *Recording Secretary.*
 CHARLES P. BOWDITCH, *Treasurer.*
 HARRY W. TYLER, *Librarian.*

Councillors for One Year.

GEORGE F. SWAIN, of Class I.
 REGINALD H. FITZ, of Class II.
 HENRY H. EDES, of Class III.

Councillors for Two Years.

ROBERT W. WILLSON, of Class I.
 THOMAS A. JAGGAR, JR., of Class II.
 JOSEPH H. BEALE, of Class III.

Councillors for Three Years.

ARTHUR G. WEBSTER, of Class I.
 MERRITT L. FERNALD, of Class II.
 GEORGE F. MOORE, of Class III.

Councillors for Four Years.

JAMES F. NORRIS, of Class I.
 GEORGE H. PARKER, of Class II.
 FRANK W. TAUSSIG, of Class III.

Finance Committee.

JOHN TROWBRIDGE, GARDINER M. LANE,
 JOHN COLLINS WARREN.

Rumford Committee.

CHARLES R. CROSS, ERASMUS D. LEAVITT,
 EDWARD C. PICKERING, ELIHU THOMSON,
 ARTHUR G. WEBSTER, LOUIS BELL,
 ARTHUR A. NOYES.

C. M. Warren Committee.

HENRY P. TALBOT, WALTER L. JENNINGS,
 CHARLES L. JACKSON, GREGORY P. BAXTER,
 ARTHUR A. NOYES, JAMES F. NORRIS,
 WILLIAM H. WALKER.

Publication Committee.

GEORGE W. PIERCE, of Class I.
 WALTER B. CANNON, of Class II.
 ALBERT A. HOWARD, of Class III.

Library Committee.

HARRY W. TYLER,
 HARRY M. GOODWIN, of Class I.
 SAMUEL HENSHAW, of Class II.
 WILLIAM C. LANE, of Class III.

House Committee.

HENRY P. TALBOT, LOUIS DERR,
 HAMMOND V. HAYES.

Committee on Meetings.

THE PRESIDENT, THE RECORDING SECRETARY,
 WILLIAM M. DAVIS, WALLACE C. SABINE,
 ARTHUR FAIRBANKS.

Auditing Committee.

ELLIOT C. CLARKE, WORTHINGTON C. FORD.

The following gentlemen were elected Fellows of the Academy:—

In Class I., Section 1 (Mathematics and Astronomy):—

George Russell Agassiz, of Boston; Ernest William Brown, of New Haven; Frederick Shenstone Woods, of Newton.

In Class I., Section 2 (Physics):—

Louis Agricola Bauer, of Washington; Percy Williams Bridgman, of Cambridge; Daniel Frost Comstock, of Boston; Arthur Louis Day, of Washington; Charles Sheldon Hastings, of New Haven; Maurice deKay Thompson, of Boston.

In Class I., Section 3 (Chemistry):—

Russell Henry Chittenden, of New Haven; Lawrence Joseph Henderson, of Cambridge; Samuel Parsons Mulliken, of Boston.

In Class I., Section 4 (Technology and Engineering):—

William Herbert Bixby, of Washington; Desmond FitzGerald, of Brookline; George Washington Goethals, of Culebra; Canal Zone; Lionel Simeon Marks, of Cambridge.

In Class II., Section 1 (Geology, Mineralogy, and Physics of the Globe):—

Waldemar Lindgren, of Washington; William Berryman Scott, of Princeton.

In Class II., Section 2 (Botany):—

Ezra Brainerd, of Middlebury; Vt.; Alexander William Evans, of New Haven.

In Class II., Section 3 (Zoölogy and Physiology):—

William Healey Dall, of Washington; John Eliot Thayer, of Lancaster, Mass.

In Class II., Section 4 (Medicine and Surgery):—

Elliott Proctor Joslin, of Boston; Charles Pickering Putnam, of Boston; Simeon Burt Wolbach, of Boston; James Homer Wright, of Boston.

In Class III., Section 1 (Philosophy and Jurisprudence):—

John Adams Aiken, of Greenfield, Mass.; Simeon Eben Baldwin, of New Haven; Frederic Dodge, of Belmont; Richard Olney, of Boston; Elihu Root, of New York; Arthur Prentice Rugg, of Worcester.

In Class III., Section 2 (Philology and Archaeology):—

Franz Boas, of New York; George Henry Chase, of Cambridge; Alfred Louis Kroeber, of Berkeley, Cal.; Hanns Oertel, of New Haven.

In Class III., Section 3 (Political Economy and History):—

Irving Fisher, of New Haven.

In Class III., Section 4 (Literature and the Fine Arts):—

Henry Leland Chapman, of Brunswick, Maine; Wilberforce Eames, of New York; Henry Lee Higginson, of Boston; Mark Antony DeWolfe Howe, of Boston; George Herbert Palmer, of Cambridge; Robert Swain Peabody of Boston; William Jewett Tucker, of Hanover, N. H.; Williston Walker, of New Haven.

The following gentlemen were elected Foreign Honorary Members:—

In Class I., Section 2 (Physics):—

Svante August Arrhenius, of Stockholm; Hendrik Antoon Lorentz, of Leyden; Augusto Righi, of Bologna.

In Class III., Section 4 (Literature and the Fine Arts):—

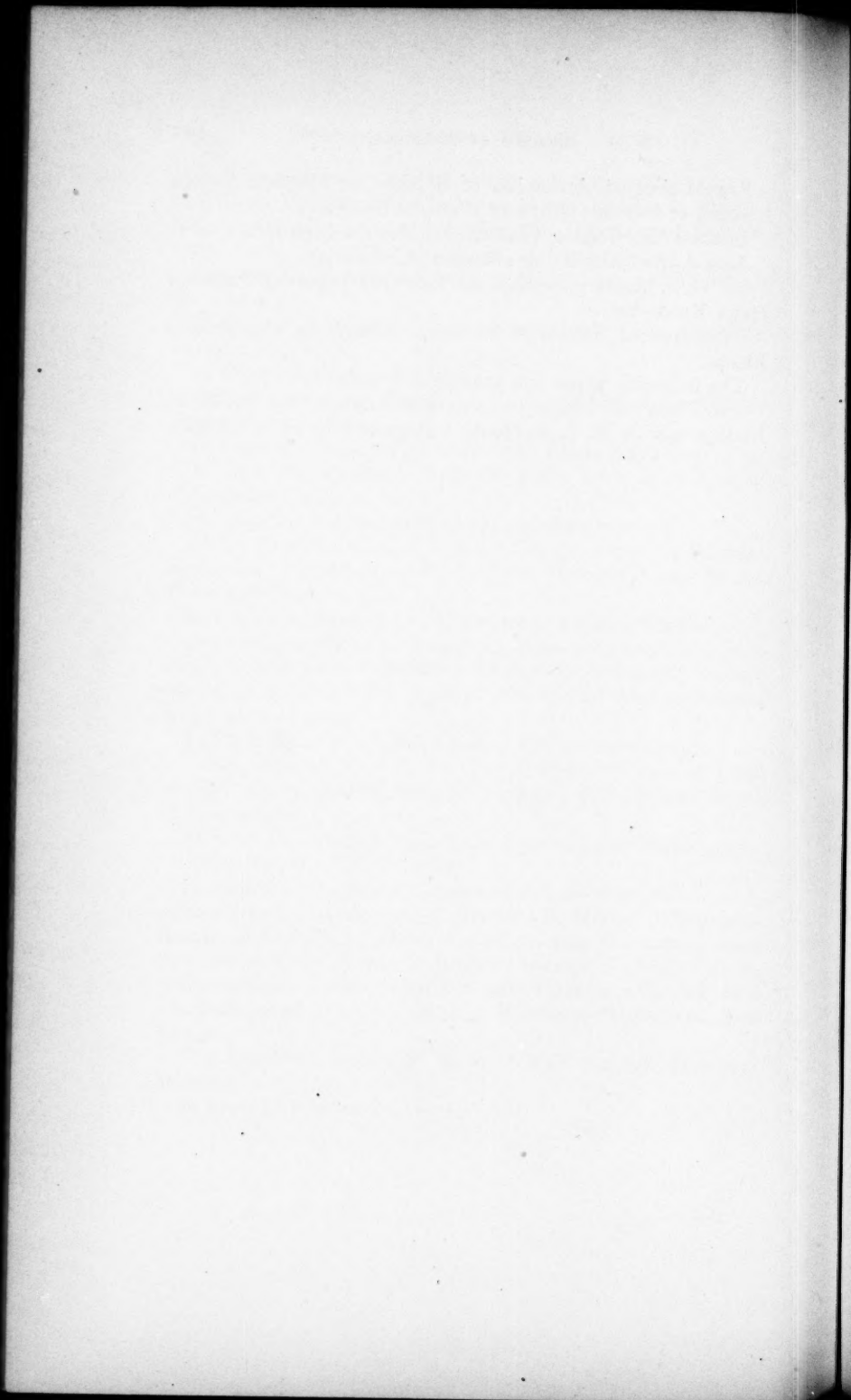
Jean Adrien Aubin Jules Jusserand, of Paris.

Dr. C. S. Minot presented the following paper by Professor Hugo Kronecker:—

“Unexpected Effects of Electrical Stimuli on the Human Biceps.”

The following paper was presented by title:—

“A Theory of Linear Distance and Angle.” By Dr. H. B. Phillips and Dr. C. L. E. Moore. Presented by H. W. Tyler.



BIOGRAPHICAL NOTICES.

FREDERICK IRVING KNIGHT.

DR. FREDERICK IRVING KNIGHT was born in Newburyport, Massachusetts, on May 18, 1841, was graduated at Yale College in 1862, from which later he received the degree of A.M., and at the Harvard Medical School in 1866. While studying in Europe he was made Instructor in Percussion, Auscultation, and Laryngology in this school, and in 1886 Clinical Professor of the last subject. He inaugurated a clinic for diseases of the chest and throat at the Massachusetts General Hospital, was consulting physician there, as well as at the Free Home for Consumptives, and the Sharon Sanatorium. A pioneer in the movement against tuberculosis, he gave time and thought to its furtherance, and it was largely through the advice given by him to Governor Greenhalge that the Massachusetts Sanatorium at Rutland was established. One of the founders of the Boston Medical Library, he was a student, as well as a practitioner, of medicine, a frequent contributor to the medical press, and a member of well-known medical societies.

His knowledge of laryngology and diseases of the chest, founded upon a broad knowledge of medicine as a whole, made him one of the foremost authorities on these subjects in the country. Possessed of every quality for which we respect the older physician, he was also conspicuously cordial to what was new in medicine, spared no pains to inform himself, and weighed the evidence critically before accepting or rejecting the new remedy or method. No one in the profession reached sounder conclusions or more quietly and courageously held his secure ground.

In the care of his patients he took exceptional pains to have everything done that might contribute to their welfare and recovery.

He was just, considerate, and generous, to the younger as well as to

the older medical men, and it was a privilege to be counted among his friends.

He was elected a Fellow of the Academy March 13, 1889. He died February 20, 1909.

FRANCIS H. WILLIAMS.

THOMAS WENTWORTH HIGGINSON.

THOMAS WENTWORTH HIGGINSON, preacher, soldier, author, was born in Cambridge, Massachusetts, December 22, 1823. His preliminary education was obtained in a private school at Cambridge, and he was graduated from Harvard College in 1841. After graduation he taught for six months in a boarding-school at Jamaica Plain, and then became private tutor to the sons of a cousin, who at that time resided in Brookline. Here, domesticated in an affectionate and interesting family, and having access to a library the shelves of which were loaded with the works of French and German writers with which for the first time he then came in contact, he led a happy life. The beautiful country about Brookline fascinated him, and he spent hours in rambling over the hills, watching the birds and animals and gathering wild flowers. "We often had school," he says, "in the woods adjoining the house, perhaps sitting in large trees, and interrupting work occasionally to watch a weasel gliding over a rock or a squirrel in the boughs."

The Brook Farm experiment was then in full career and Higginson came in contact, while living in Brookline, with several of the young men who were at that time giving practical proof of their faith in communistic theories. Obviously these theories did not reach him, although, so far as money matters were concerned, he at this time deliberately renounced all thoughts of the accumulations that might be had from the law as a profession, and under the influence of the books that he was then reading, concluded that a life of extreme economy was without terror for him. So minded, he became engaged to be married, and returned to Cambridge in September, 1843, where he entered college as a "resident graduate," having no clearly defined purpose or intention as to the future, but attracted by the thought of a purely literary life carried on in an unworldly spirit with the possible chance of an appointment as professor as a reward. The influences that surrounded him while in Cambridge are best told by himself: "There were always public meetings in Boston to be attended, there were social reform gatherings where I heard the robust Orestes Brownson and my eloquent cousin, William Henry Channing ;

there were anti-slavery conventions, with Garrison and Phillips; then on Sunday there were Theodore Parker and James Freeman Clarke, to show that one might accomplish something and lead a manly life even in the pulpit." Then, as ever after, manliness was with him an essential feature of life, and it was with the thought that "even in the pulpit" a man might lead a "manly life," that he gravitated towards the "liberal ministry," and in preparation therefor entered the Harvard Divinity School. He completed the regular course of study there and graduated in 1847.

On the 30th of September of that year he married, in Boston, his cousin, Mary Elizabeth, daughter of Dr. Walter Channing. Mrs. Higginson, not long after her marriage, became a confirmed invalid, but she survived until September 2, 1877, when she died at Newport, Rhode Island. In the preface of "Malbone," Higginson makes the statement that "Aunt Jane," a character in that novel, was studied as closely as possible from real life, and the bright sayings of the lady were the fruit of a long habit of jotting down her actual conversation. We shall probably not be far out of the way if we conclude that this statement points out where a clue to the character of Mrs. Higginson may be found.

In 1847, the year that he graduated at the Divinity School, and the year also in which he was married to his cousin, he received a call from the First Religious Society at Newburyport, then ostensibly Unitarian, which call he accepted. He was ordained, at his own suggestion, by the Society itself without the intervention of an ordaining council. In Newburyport he was drawn into the temperance agitation, the peace movement, the woman's rights movement, and the anti-slavery movement. He did, indeed, accept in 1848 — though hopeless of election — the nomination for Congress from the Free Soil party, a party defined by him as "political abolitionists," and, while still a settled clergyman at Newburyport, he actually entered upon an active campaign in that congressional district. His nomination was due, partly at any rate, to Whittier. At Cambridge he had been a friend and associate of Lowell. His life at Newburyport brought him in contact with Whittier. The anti-slavery sentiments of both these poets drew him into close and sympathetic touch with them, and though he was strong enough to stand alone, he welcomed the support of their influence.

His career as an anti-slavery candidate for Congress, stumping the district in search of votes, or perhaps it would be better to say in an effort to create public opinion and to identify himself with a cause, naturally aroused hostility in his congregation. He himself says that

he preached himself out of the pulpit. His sermons doubtless had to do with his separation from this congregation, but his political speeches must also be reckoned in the general accounting. For two years and a half he retained connection with this parish, and during all that time he had the cordial support of the younger members of his congregation. Then, for two years after the severance of this connection, he continued to live in Newburyport, teaching private classes, serving on the school committee, organizing public evening schools, and enlisting the young ladies of the town in the instruction of factory girls, thus making himself a living force in local affairs. As if all this were not enough for one man, he was at the same time busily engaged in writing editorials and communications for three or four newspapers.

In February, 1851, a fugitive slave, known as Shadrach, was rescued by Boston negroes from the hands of the officers having him in custody, while actually within the precincts of the Suffolk Court House. This evasion of the enforcement of the fugitive-slave law caused a commotion even in Washington, and it was not long before a second test was made of the power of the federal government to enforce in Massachusetts an obnoxious law in a community thoroughly loyal and obedient to law, but hostile to the principles on which this particular law was based.

Following the rescue of the negro Shadrach in February, 1851, Higginson joined the Vigilance Committee in Boston, an organization the purpose of which was apparently to be on the alert and ready to aid in such cases, but without definite plans as to how assistance might be given. The committee was divided in opinion on the question of forcible resistance to the authorities. His official connection with this organization soon caused him to be summoned to Boston, where in April of the same year the arrest of Thomas Simms, another fugitive, brought the Vigilants face to face with the question of what they should do. At the meeting of the committee Higginson urged action in opposition to the enforcement of the law, and at a crowded public meeting held subsequently in Tremont Temple he spoke vehemently, his counsels on this occasion being characterized as of a nature to bring the community to the verge of a revolution. More moderate speeches at the same meeting had the effect of counteracting the influence of his speech, and Higginson was left to organize secretly, as best he could, a plan for the rescue of Simms. Precautions taken by the officers having the fugitive in charge prevented the success of the plan for the rescue.

It happened that the United States Marshal having charge of the fugitive was Charles Devens, a schoolmate and a friend of Higginson. The relations of these two men to each other and to the subject under discussion thoroughly illustrate the complexity of the political situa-

tion in Massachusetts caused by the attempts at that time to enforce the fugitive-slave law. Here were two men, both hostile to slavery, both animated by a keen sense of honor, both striving to do their duty. The one if he should perform the duties of the office which he had accepted would be compelled to restore to slavery an individual, entitled under local laws to his personal freedom. The other, should the decision of the case have the effect of returning the fugitive to his master, and should opportunity offer to attempt the rescue of the fugitive, would be prompted by a sense of duty to violate the laws of his country and in such event would himself become, in all probability, either a fugitive from justice or a prisoner.

Higginson wrote to Devens imploring him to resign rather than to be the instrument of sending a man into bondage. The answer, was courteous, but Devens considered that, however repugnant the performance of this service might be, the service was nevertheless inherent upon his having accepted the office of marshal. Simms was returned to servitude. The vigilance of the police prevented any attempt to release him. Devens showed how deeply he felt the burden of rendering official service which would perhaps cost a man his freedom, by making two efforts at a later date to secure through purchase the liberty of the negro, the first offer being refused by the master and the second attempt being frustrated by the outbreak of the war. In the course of military events Simms recovered his freedom, and Devens at a later period was able to help him pecuniarily and otherwise.

In 1852 Higginson was invited to take charge of the Worcester Free Church, an organization which sprang up under the influence of Theodore Parker's society in Boston, in which there was no church membership, which did not call itself specifically Christian, and which held no communion service. This call he accepted and his evening lectures or sermons soon became very popular. He retained connection with this church for six years and in 1858 resigned in order to devote his life to literary pursuits.

It will be seen at a glance that his relations with his followers here were widely different from those which existed between himself and his congregation at Newburyport. Fresh from the Divinity School, without political record, he had assumed charge at Newburyport of a congregation having a history of two hundred years behind it and having as a body no pronounced political opinions. There was, however, a certain amount of denominational adherence and of pride in the old church. On the other hand, he came to Worcester, a preacher without a congregation and an open advocate of resistance to the government in all attempts to enforce the fugitive-slave law. This move was made at the

call of a body of active reformers, all abolitionists, having no strong element of cohesion; a mere aggregation of extremely independent individuals; leaders in public movements, whose popular influence was restrained by the fact that they were combating local prejudices and attacking opinions sustained by conservatism and social power. Higginson says of Wendell Phillips that to abolitionism he "sacrificed his social position, his early friendships, his professional career," and of himself he says that he found himself in fashion in Worcester, "at least with the unfashionable." The portals of society could not have remained closed in that place to a Higginson married to a Channing if he had cared to cause them to open, but the illness of his wife and the gratification that he derived from social intercourse with those who sympathized with his views prevented him from penetrating abodes where an abolitionist, a woman's rights man, and a Parkerite would not have been altogether *persona grata*. He says in one place, "I cannot dispense with the society which we call uncultivated." If he found any such in Worcester he did not rely upon it altogether, for he discovered cultivated, genial friends, unknown to society, with whom he had delightful intercourse. The home of a tailor, for instance — of whom Higginson wrote that he had the freshest and most original mind in Worcester — who stood at his cutting board all day, and who at night read Browning with his charming wife, and this too at a time when to be able to read Browning meant even more than it does to-day, furnished one place of resort. In such families as this, where the free interchange of opinions on all topics was permissible, he found the sort of social intercourse that he wanted. His time was taken up with outdoor exercise, writing for the papers, and at times in giving a helping hand to some escaped slave. Naturally, fugitives from servitude claimed assistance from such a body as his church, and it follows of course that actual aid was freely given to help them on their way to freedom.

He quotes in his "Cheerful Yesterdays" from a contemporary journal, apparently his own, in illustration of that curious period, a paragraph describing the impression of the writer on thus participating in revolutionary work, in which the journalist states that it is strange "to see law and order, police and military, on the wrong side and find good citizenship a sin, and bad citizenship a duty. . . ."

On the 25th of May, 1854, there came to him a summons to Boston to attend a public meeting to be held in Faneuil Hall in consequence of the arrest of Anthony Burns, another fugitive. Higginson found the Vigilance Committee inadequate for the situation through the non-resistance element and through division of opinion. Those

who were willing to act personally in forcible resistance were, however, left in charge of the situation, and of these Higginson was selected as the leader. The fugitive was confined in the United States Court room in the Suffolk Court House, the jails of the state not being at the behest of Federal officers for the confinement of persons who had not violated any state law. A plan was devised to take advantage of the Faneuil Hall meeting. An announcement was to be made, while the meeting was in progress, that an attack on the Court House was being made. This would break up the meeting and bring a mob up to Court Square, under cover of which such an attack might be successful. The various parts of this disjointed scheme did not fit very well together, and the attack resulted in a mere fiasco. The killing of one of the deputies at an early stage of the affair seems to have paralyzed the combatants, and out of it all the only visible result was that T. W. Higginson, alone of all the clamorous abolitionists, had shown conspicuous courage, the only real contestant for supremacy in that time being an unknown colored man. Then followed the consequences of the assault; an inquest by the grand jury and the indictment of Theodore Parker, Wendell Phillips, Thomas Wentworth Higginson, and others. The fact that a man had been killed at the Court House gave to the proceedings a solemnity and an importance which they might otherwise have lacked. The distinguished men thus brought to the bar made no effort to escape their trial, but the issue was never fairly met by the submission of the case to the jury. The indictment was quashed on a technicality. This episode cost Higginson the good will of many persons whose approval he would have enjoyed, but this fact did not cause him to swerve a jot from his position. Neither then nor thereafter did he offer excuse or apology for what he had done. He was actuated by principle, firm, unyielding, and unchangeable.

Serious as was the position of these men while under indictment, it is evident that Higginson's family were not much disturbed by it, nor had they much fear of the result. His mother, writing concerning it, picked out a curious phrase in the indictment and referring to it facetiously informed her correspondent that she was not troubled at having a son "riotously and riotously disposed," while on the occasion of a suggestion made by his wife that her letters to him while he was in prison might be read by the jailer, another member of the family remarked, "Not if he writes them in his usual handwriting."

In October, 1854, a deputy supposed to have come to Worcester in search of evidence against the participants in the Burns riot was recognized and was attacked by a mob of negroes. A number of abolitionists, among whom was Higginson, interposed, protected the deputy,

and with much difficulty saved him from serious harm and succeeded in getting him out of the city. Higginson rode with him in the vehicle in which he was transported to safety, and, although his feelings of hostility towards the man were not vile enough to permit his sacrifice by the mob, he humorously tells us that while he thus had him at his mercy he took an inhuman advantage of him and gave him a discourse on the baseness of his career.

After the Burns affair all attempts to enforce the fugitive-slave law in Massachusetts ceased, but the abolitionists made preparation for active interference in case opportunity offered, and kept in commission a yacht which was nominally for hire, but which was ready at all times for several years to receive a fugitive or, as the case might be, his master, and take him on a cruise while the excitement should last. Higginson was a stockholder in this yacht.

As was the case when in Newburyport, he did not allow his crusade against slavery to prevent his taking an active part in Worcester in affairs of more immediate and local importance. He interested himself in the new question of a prohibitory law, was for a time secretary of the state committee, and took a hand in the local enforcement of the law. He was deeply concerned with the problem of discharged convicts, and at a later period he served as a delegate to a meeting of prison reformers in Europe. He was firm in the conviction that the lives of many of these convicts could be rescued.

The peculiar nature of his religious society led to a certain amount of ostracism. Edward Everett Hale was for a time, at any rate, the only clergyman in Worcester who would exchange with him. Later he was brought into amicable relations with others. As was to be expected, he was put on the school committee, from which, however, he was subsequently dropped for defending the right of a Roman Catholic father to decide which version of the Scriptures his child should read in school. Later he was reinstated. He had a hand in organizing the Worcester Public Library. He, with others, organized a local Natural History Society. His fondness for out-of-door exercise took shape in tramps over the hills about Worcester and in boating on Lake Quinsigamond and in the organization of a gymnastic club, a skating club, and a cricket club, of each of which he was president.

He dates the beginning of his literary life from the publication of "Saints and their Bodies" in the "Atlantic Monthly" in 1858. It is true that the "North American Review," the "Christian Examiner," and "Putnam's Magazine" had already published articles from his pen, and that numerous communications and short poems had found a ready welcome in the columns of certain newspapers, but for such recog-

dition as this he cared but little. The acceptance of an article by the Atlantic was for him a baptism as a litterateur.

From November, 1855, to May, 1856, he was in Fayal. What he found there worth observing is set forth in a paper entitled "Fayal and the Portuguese," originally published in the "Atlantic Monthly" in November, 1860, and reprinted in "Outdoor Papers."

The Kansas Nebraska Act was passed in 1854, and the struggle for possession of the territory of Kansas between the free states and the slave states began at once. In Massachusetts organized emigration from that state to Kansas was effected through the agency of the Emigrant Aid Society. This movement was at first of a peaceful nature, but later such emigrants as went forth were better prepared for emergencies. Higginson arrived in Boston from Fayal in May, 1856. A public meeting which was held in Worcester in honor of his return was converted into a call for volunteer emigrants to Kansas. A committee was appointed, of which he was secretary, under whose auspices three parties of emigrants were sent forward armed with rifles and pistols and prepared for camping out. He himself was first sent to St. Louis to look out for a stray party of emigrants whose progress had been hindered, and later, as agent of the National Kansas Committee, having its headquarters at Chicago, he was sent to Kansas with a convoy of rifles to oversee a party of emigrants. On this expedition he met the famous "Jim Lane" at the head of a party of mounted followers, and was honored by an appointment on Lane's staff with the rank of brigadier-general. He passed safely through Kansas, though the trip was not without the fascination of actual peril. He speaks of the "tonic life" of these weeks, and says that when they were over and he arrived where he could call for help upon a policeman, he felt as if "a despicable effeminacy had set in."

In January, 1857, he joined with a few other Republicans and Garrisonian Abolitionists in calling and in holding a state disunion convention. A call for a national disunion convention was also circulated, Cleveland being the appointed place of meeting, but the financial panic of 1857 prevented the meeting of this convention.

February 2, 1858, John Brown wrote to him, as "an abolitionist" and "a true man," for pecuniary aid in perfecting what Brown considered the most important undertaking of his life. This celebrated abolitionist was already famous, and Higginson says that there was but one way of thinking among the Kansas Free State men as to the most extreme act of John Brown's Kansas career, the so-called "Pottawatomie Massacre." As one of them put it, Brown saw the necessity of some such blow and had the nerve to strike it. "Personally," adds

Higginson, "I have never fully reconciled myself to this vindication of 'the blow,'" and he claims that Brown is to be judged as "a pure enthusiast — fanatic, if you please."

Brown had developed a plan for penetrating Virginia with a few followers, not with a view to an insurrection, but with intent to assemble fugitives, and if unable to protect them in local fastnesses to send them to Canada. In this plan Higginson, Theodore Parker, and others of the anti-slavery leaders co-operated and raised money for its furtherance. The details of the scheme were betrayed, and action on the part of Brown was necessarily postponed. In October, 1859, came the attack on Harper's Ferry, a proceeding on the part of Brown radically different from the plan previously proposed by him, in aid of which the money referred to above had been contributed, and further a proceeding which was opposed by Brown's followers. For a time all those who had been in touch with this fanatical leader and all those who had furnished him with money were under suspicion and were in danger of arrest. Some fled to Canada, but Higginson felt that it was his duty to stand his ground and give Brown his moral support, and he goes on to state that with Brown in confinement there was, of course, an immediate impulse to rescue him from prison. "I do not know how far this extended," he says, "and can only vouch for myself." Brown, however, had absolutely prohibited any such attempt, and unless he could be led to change his opinion any efforts to rescue the inflexible old man would be thrown away. It occurred to Higginson that Brown's wife might, in a personal interview, influence the prisoner to recede from this position, and he went to North Elba and secured her co-operation. The plan failed through the stubbornness of Brown, who refused positively to see his wife. A harebrained effort was shortly afterward started to rescue two of Brown's followers, but the leader chosen for the purpose, after carefully inspecting the ground, pronounced the scheme impracticable. When this proposition was under consideration, Higginson went to Harrisburg to meet the leader of the enterprise, to arrange details, and to take part in the rescue if it should be attempted. On the abandonment of the expedition he returned to his home.

At the outbreak of the war he visited Governor Andrew and volunteered, if provided with the necessary funds, to invade the Virginia mountains with a small force of men selected from the Kansas Free State men, and kindle a back fire there, with a view of distracting attention from the national capital, then in peril. There was no contingent fund in Massachusetts that could be used, but a small sum of money was raised from private sources. Governor Curtin of Pennsyl-

vania was consulted, but events moved so rapidly that the proceeding became unnecessary and even undesirable.

In the spring of 1861 he was offered the command of the 4th Battalion of Infantry, then hastily raised for government service. Notwithstanding the fact that the impending collision had for some time back induced him to turn his reading towards military works, so that he had acquired an academic acquaintance with the theories of attack and defense, he did not feel competent to assume charge in the field of a battalion of troops. Moreover the state of his wife's health at that time was precarious, and she was especially dependent upon him. A third and probably a prevailing reason was the uncertainty of the government position on the slavery question, and the fear that, as commanding officer, he might be compelled to return fugitive slaves to their masters.

By the fall of that year the anti-slavery position of the government had become more clearly defined, and he sought and obtained permission to raise a regiment of which he was to be second in command. After three months of hard labor in raising companies in different parts of the state, and after about half the necessary companies had been raised, an order putting a stop to recruiting rendered all of this preliminary work abortive. Recruiting was renewed in 1862, and he then raised a company for the 51st regiment, of which company he was commissioned as Captain, September 25, 1862. He quotes in his "Cheerful Yesterdays" a popular nonsense rhyme made at his expense about this time which ran as follows:

"There was a young curate of Worcester
Who could have a command if he'd choose ter,
But he said each recruit
Must be blacker than soot,
Or else he'd go preach where he used ter."

Very shortly after receiving his commission as Captain in the 51st regiment he was offered by General Saxton, military commander of the Department of the South, the command of a regiment of freed slaves. This offer fulfilled, he says, the dream of a lifetime, and after investigating the circumstances under which the offer was made, he accepted it. November 10, 1862, he became Colonel of the 1st South Carolina volunteers, afterwards the 33d United States colored troops, the first regiment of freed slaves mustered into the United States service. The regiment was stationed near Beaufort, South Carolina. During his connection with it, whether on the march or in camp, he made a close, analytical study of the negro as a soldier, the record of which is to be

found in his "Army Life in a Black Regiment." It chanced that he was not engaged in any large battle, but he went on expeditions up the St. Mary's, the St. John's, and the Edisto. While up the St. John's the city of Jacksonville was captured by his command and was held by him until he was ordered back to head-quarters. On the Edisto raid on the 10th of July, 1863, he was wounded. He was shortly thereafter invalided and sent North and, although he thought at one time that he was well enough to resume active service, he found on returning to his regiment that he was not able to bear the exposure of camp life. He resigned in October, 1864.

His wife had meantime, for the sake of her health, gone to Newport to live. He joined her there and resumed literary work. Suggestions as to his life in that place will be found in "Malbone" and in "Old Port Days."

In 1878, shortly after the death of his wife, he took a trip to Europe, where he was cordially received as a representative of American literature, and where he met Froude, Carlyle, Sir Frederick Pollock, Matthew Arnold, Darwin, and many other distinguished Englishmen. On his return to this country he settled at Cambridge, where in February, 1879, he married Mary P. Thacher, herself an authoress of some note.

The numerous services which he performed for the public in Newburyport and at Worcester indicate his sense of civic responsibility and his willingness to give to the public without reward what there was that was available in his still vigorous body and his richly endowed intellect. Though no longer able to endure as much as formerly, still he performed substantially the same rôles at Newport and at Cambridge, renewing his former experiences even to the extent of being dropped from the Newport School Committee, serving as trustee of public libraries, organizing social clubs, and patronizing Shakespeare and Browning Societies. To his connection with the Colonial Club of Cambridge we owe the preservation on canvas of an adequate representation of his person. The picture of the first president of the club graces the walls of the clubhouse. While in Newport and in Cambridge he was for many consecutive years engaged in giving lectures and in editorial works on the "Index" and the "Woman's Journal."

He was elected to the Legislature in 1880 and again in 1881. He served one year as chief of the personal staff of Governor Long. He was three years on the State Board of Education and served seven years as state military and naval historian. He says, indeed, "Looking back fifty years, I cannot put my finger on five years when I myself was not performing some official service for the city or state or both simultaneously." He entered actively the Cleveland campaign in 1888

and reluctantly ran for Congress on the democratic ticket. Although not elected, he was gratified by the vote.

His old age in Cambridge and at his charming summer residence at Dublin, New Hampshire, was peaceful, and his days were full of happiness. The various reforms in which he had been interested were either accomplished or in a fair way of being so. He no longer felt estranged among his fellow Unitarians. They had so nearly reached his own position on the question of religious freedom that he could and did join the congregation of the First Parish in Cambridge. He was blessed with offspring, and, indeed, before he died he was glad to welcome in his household a new member of the family, of a generation twice removed from his own.

With growing years and increasing fame he was accustomed to receive his friends on the recurrence of his birthday, and this custom he kept up to the last whenever his health would permit. These receptions were originally inaugurated on his seventieth birthday, and the scores of persons who annually thereafter took advantage of them to pay their respects to the Colonel bore testimony to the extent of his fame and to the great change in the popular estimate of his character since the days of his personal attack on the Suffolk Court House. They were interrupted by a severe illness which kept him in the house for nearly two years. It was during this period of physical suffering that his "Cheerful Yesterdays" was written. Propped up in bed, leaning against the pillows, he dictated the book, the spirit of which shows that even under those circumstances his to-day as well as his yesterday was cheerful.

He was honored by the Western Reserve and by Harvard Universities with the degree of LL.D. He was Vice-President of the Liberal Congress of Religion, Fellow of the American Academy of Arts and Sciences, Corresponding Member of the Royal Society of Canada, Member of the American Academy of Arts and Letters, and Member of the Massachusetts Historical Society.

A chronological list of his publications was prepared and published in 1906 by the Cambridge Public Library, and in this publication there is also an alphabetical list of books and articles pertaining to his life and career. The information contained therein will be found to be very serviceable to the biographer of Colonel Higginson. It needs, however, to be supplemented with the publications made after 1906. His collected works were reprinted in 1900 in seven volumes. In 1906 a volume was put forth entitled "Part of a Man's Life."

Colonel Higginson died May 9, 1911. He was accorded a military funeral by the Loyal Legion, of which he was a member, and was

escorted to his last resting place by a guard of colored men, a fitting tribute on their part to the devotion of his life to the cause of the down-trodden of their race.

When the Colonel entered the field of active life he devoted his energies to three causes : Freedom for the colored race ; freedom from the trammels of the law, for women ; freedom in religious belief from the restraints of dogma. To the first of these causes he sacrificed, in his youth at least, social position and political ambition, and later the chance of military promotion. To a certain extent the championship of the second and third of these causes could only be prosecuted during the same period under similar disadvantages. Coupled with these three reforms, but holding a secondary position in his esteem, was the open advocacy of Outdoor Exercise or Athletics, of Higher Education for Women, and of Temperance for all.

He lived to see the slave released from bondage and to see Woman's Suffrage adopted in several of our states. He attended services in later life in a church where Theodore Parker would have been welcomed in the pulpit. He had but to cast his eyes across the Charles to see, in the Stadium, the evidence of the extraordinary hold upon modern collegiate life developed by athletics and intercollegiate games. The group of buildings made use of by Radcliffe College for the higher education of women in Cambridge he might daily see, and he might also have heard that the preponderant number of women in some of the Western State universities made it questionable in the minds of some philosophic observers whether in the near future it might not prove that there would be a body of highly educated females in these states, while the bulk of the men, absorbed in business and industries, would be found to have contented themselves with a high school education. If in his latter days he had travelled from Maine to the Mexican border he would have found that Prohibition had so far prevailed that a thirsty man would often have to wait for entry into an unprogressive state if he wanted anything stronger than water to drink. There still remained fields in which, if strength had been granted him, he might as a reformer have worked. International arbitration, civil service reform, and the abolition of monopolies are to be found in his list of what remains to be accomplished.

Any man who reads Colonel Higginson's accounts of his personal experiences will realize not only that he was a courageous man, being absolutely devoid of fear, but also that he actually thirsted for adventure. He would have enjoyed being present at the liberation of Shadrach, not alone because the rescue of the slave was in accord with his moral convictions, but because of an impulse in his blood which he

describes as "an intrinsic love of adventure." This love of adventure doubtless had voice in all his after proceedings. The story of his army life is tinctured with it. He knows "nothing in life more fascinating than the nocturnal ascent of an unknown river leading far into an enemy's country," or, again, "of going into a region where peril made fascination." At any time, he says, by going into the outskirts at one of his camps, one could have a skirmish which, he adds, was nothing but fun. Such expressions as these betray the soldier rather than the preacher, the lecturer, or the translator of Epictetus and the Sonnets of Petrarch.

At the outset of his appeal to the public through the press he seemed disposed to make use of poetry rather than prose. Twenty titles are given in the chronological list published by the Cambridge Public Library of publications in newspapers in the years 1846-1849 inclusive. Of these fifteen are sonnets, poems, or hymns. Thereafter the poem is the exception, but his "Outdoor Papers" are filled with the aroma of woods and the fragrance of flowers. The cadence of their sentences is so beautifully adjusted that they might almost pass for poems. He seldom ventured into the land of fiction, and once only tried his hand at a novel. A competent critic says that "his writings show a deep love of nature, art, and humanity, and are marked by vigor of thought, sincerity of feeling, and a grace and finish of style."

In 1875 he published "Young Folks' History of the United States," which had a marvellous success in this country, new editions appearing from time to time thereafter, while in Europe the volume was translated into the French, German, and Italian tongues. He also engaged in other historical work, and published in 1885 a "Larger History of the United States"; in 1893 "English History for American Readers," in collaboration with Professor Edward Channing; and in 1905 a "History of the United States," in collaboration with Professor William McDonald, this last being practically an enlarged edition of his "Larger History of the United States."

In Colonel Higginson's sketch of Theodore Parker's life he says, "There may be some whose fame is so ill established that one shrinks from speaking of them precisely as one saw them; but this man's place is secure, and that friend best praises him who paints him just as he seemed." No better suggestion could be made to the biographer of Colonel Higginson than the words which he himself uses concerning the task set for the biographer of Theodore Parker. So far as the person engaged in the memoir of Colonel Higginson is concerned, he is relieved from the necessity of explanation or apology for Higginson's resistance to constituted authorities by the frankness of the Colonel

himself, who has revealed his entire career to the world with a sincerity which would permit one who differed from him as to the propriety of the methods of which he at times made use, to appropriate freely from the autobiographical writings which he has left behind him. To a great extent this is what I have done, thus trying to do justice to a friend whom I honored even when I did not agree with him. The story herein given of the career of this aggressive reformer, this outspoken independent preacher, this courageous soldier and scholarly author, this useful citizen and brilliant man, is practically told in his own words. Should it seem that his social charms have been inadequately developed and that there is no sufficient picture of the gentle urbanity of his later years, we must hope that this phase of the Colonel's character will be more forcibly portrayed in the forthcoming life promised at the hand of Mrs. Higginson.

ANDREW MCFARLAND DAVIS.

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Herbert Langford Warren	Cambridge
Barrett Wendell	Boston

FOREIGN HONORARY MEMBERS.—54.

(Number limited to seventy-five.)

CLASS I.—*Mathematical and Physical Sciences.*—16.SECTION I.—*Mathematics and Astronomy.*—5.

Arthur Auwers	Berlin
Sir George Howard Darwin	Cambridge
Sir David Gill	London
Felix Klein	Göttingen
Émile Picard	Paris

SECTION II.—*Physics.*—5.

Oliver Heaviside	Torquay
Sir Joseph Larmor	Cambridge
Augusto Righi	Bologna
John William Strutt, Baron Rayleigh	Witham
Sir Joseph John Thomson	Cambridge

SECTION III.—*Chemistry.*—4.

Adolf, Ritter von Baeyer	Munich
Emil Fischer	Berlin
Wilhelm Ostwald	Leipsic
Sir Henry Enfield Roscoe	London

SECTION IV.—*Technology and Engineering.*—2.

Heinrich Müller-Breslau	Berlin
William Cawthorne Unwin	London

CLASS II. — *Natural and Physiological Sciences.* — 17.SECTION I. — *Geology, Mineralogy, and Physics of the Globe.* — 4.

Sir Archibald Geikie	Haslemere, Surrey
Julius Hann	Vienna
Albert Heim	Zurich
Sir John Murray	Edinburgh

SECTION II. — *Botany.* — 4.

Adolf Engler	Berlin
Wilhelm Pfeffer	Leipsic
Hermann, Graf zu Solms-Laubach	Strassburg
Eduard Strasburger	Bonn

SECTION III. — *Zoölogy and Physiology.* — 5.

Ludimar Hermann	Königsberg
Hugo Kronecker	Bern
Sir Edwin Ray Lankester	London
Elie Metchnikoff	Paris
Magnus Gustav Retzius	Stockholm

SECTION IV. — *Medicine and Surgery.* — 4.

Emil von Behring	Marburg
Sir Thomas Lauder Brunton, Bart.	London
Angelo Celli	Rome
Sir Victor Alexander Haden Horsley	London

CLASS III. — *Moral and Political Sciences.* — 19.SECTION I. — *Philosophy and Jurisprudence.* — 4.

Arthur James Balfour	Prestonkirk
Heinrich Brunner	Berlin
Albert Venn Dicey	Oxford
Sir Frederick Pollock, Bart.	London

SECTION II. — *Philology and Archæology.* — 7.

Ingram Bywater	London
Friedrich Delitzsch	Berlin
Hermann Diels	Berlin
Wilhelm Dörpfeld	Athens
Henry Jackson	Cambridge
Hermann Georg Jacobi	Bonn
Sir Gaston Camille Charles Maspero	Paris

SECTION III. — *Political Economy and History.* — 5.

James Bryce	London
Adolf Harnack	Berlin
John Morley, Viscount Morley of Blackburn	London
Sir George Otto Trevelyan, Bart.	London
Pasquale Villari	Florence

SECTION IV. — *Literature and the Fine Arts.* — 3.

Georg Brandes	Copenhagen
Jean Adrien Aubin Jules Jusserand	Paris
Rudyard Kipling	Burwash

STATUTES AND STANDING VOTES

STATUTES

Adopted November 8, 1911: amended May 8, 1912

CHAPTER I

THE CORPORATE SEAL

ARTICLE 1. The Corporate Seal of the Academy shall be as here depicted:



ARTICLE 2. The Recording Secretary shall have the custody of the Corporate Seal.

See Chap. v. art. 3; chap. vi. art. 2.

CHAPTER II

FELLOWS AND FOREIGN HONORARY MEMBERS AND DUES

ARTICLE 1. The Academy consists of Fellows, who are either citizens or residents of the United States of America, and Foreign Honorary Members. They are arranged in three Classes, according to the Arts and Sciences in which they are severally proficient, and each Class is divided into four Sections, namely :

CLASS I. *The Mathematical and Physical Sciences*

Section 1. Mathematics and Astronomy

Section 2. Physics

Section 3. Chemistry

Section 4. Technology and Engineering

CLASS II. *The Natural and Physiological Sciences*

Section 1. Geology, Mineralogy, and Physics of the Globe

Section 2. Botany

Section 3. Zoölogy and Physiology

Section 4. Medicine and Surgery

CLASS III. *The Moral and Political Sciences*

Section 1. Theology, Philosophy, and Jurisprudence

Section 2. Philology and Archaeology

Section 3. Political Economy and History

Section 4. Literature and the Fine Arts

ARTICLE 2. The number of Fellows shall not exceed Six hundred, of whom not more than Four hundred shall be residents of Massachusetts, nor shall there be more than Two hundred in any one Class.

ARTICLE 3. The number of Foreign Honorary Members shall not exceed Seventy-five. They shall be chosen from among citizens of foreign countries most eminent for their discoveries and attainments in any of the Classes above enumerated. There shall not be more than Twenty-five in any one Class.

ARTICLE 4. If any person, after being notified of his election as Fellow, shall neglect for two months to accept in writing and to pay his Admission Fee (unless he be at that time absent from the Commonwealth) his election shall be void ; and if any Fellow resident within fifty miles of Boston shall neglect to pay his Annual Dues for twelve months after they are due, provided his attention shall have been called

to this Article of the Statutes in the meantime, he shall cease to be a Fellow; but the Council may suspend the provisions of this Article for a reasonable time.

With the previous consent of the Council, the Treasurer may dispense (*sub silentio*) with the payment of the Admission Fee or of the Annual Dues or both whenever he shall deem it advisable. In the case of officers of the Army or Navy who are out of the Commonwealth on duty, payment of the Annual Dues may be waived during such absence if continued during the whole financial year and if notification of such expected absence be sent to the Treasurer. Upon similar notification to the Treasurer, similar exemption may be accorded to Fellows subject to Annual Dues, who may temporarily remove their residence for at least two years to a place more than fifty miles from Boston.

If any person elected a Foreign Honorary Member shall neglect for six months after being notified of his election to accept in writing, his election shall be void.

See Chap. vii. art. 2.

ARTICLE 5. Every Fellow hereafter elected shall pay an Admission Fee of Ten dollars.

Every Fellow resident within fifty miles of Boston shall, and others may, pay such Annual Dues, not exceeding Fifteen dollars, as shall be voted by the Academy at each Annual Meeting, when they shall become due; but any Fellow shall be exempt from the annual payment if, at any time after his admission, he shall pay into the treasury Two hundred dollars in addition to his previous payments.

All Commutations of the Annual Dues shall be and remain permanently funded, the interest only to be used for current expenses.

Any Fellow not previously subject to Annual Dues who takes up his residence within fifty miles of Boston, shall pay to the Treasurer within three months thereafter Annual Dues for the current year, failing which his Fellowship shall cease; but the Council may suspend the provisions of this Article for a reasonable time.

Only Fellows who pay Annual Dues or have commuted them may hold office in the Academy or serve on the Standing Committees or vote at meetings.

ARTICLE 6. Fellows who pay or have commuted the Annual Dues and Foreign Honorary Members shall be entitled to receive gratis one copy of all Publications of the Academy issued after their election.

See Chap. x. art. 2.

ARTICLE 7. Diplomas signed by the President and the Vice-President of the Class to which the member belongs, and countersigned by the Secretaries, shall be given to all the Fellows and Foreign Honorary Members.

ARTICLE 8. If, in the opinion of a majority of the entire Council, any Fellow or Foreign Honorary Member shall have rendered himself unworthy of a place in the Academy, the Council shall recommend to the Academy the termination of his membership; and if three fourths of the Fellows present, out of a total attendance of not less than fifty, at a Stated Meeting, or at a Special Meeting called for the purpose, shall adopt this recommendation, his name shall be stricken from the Roll.

See Chap. iii.; chap. vi. art. 1; chap. ix. art. 1, 7; chap. x. art. 2.

CHAPTER III

ELECTION OF FELLOWS AND FOREIGN HONORARY MEMBERS

ARTICLE 1. Elections of Fellows and Foreign Honorary Members shall be by ballot, and only at the Stated Meetings in January and May. Three fourths of the ballots cast, and not less than twenty, must be affirmative to effect an election.

ARTICLE 2. Candidates must be proposed in writing by two Fellows of the Section for which the proposal is made. These signed nominations shall be sent to the Corresponding Secretary and shall be retained by him until the fifteenth of the following October or February, as the case may be, when all nominations then in his hands shall be immediately sent in printed form to every Fellow having the right to vote, with the names of the proposers in each case, and with a request to send to the Corresponding Secretary written comments on these names not later than the fifth of November or the fifth of March respectively.

All the signed nominations, with the comments thereon, received up to the fifth of November or the fifth of March shall be sent at once to the appropriate Class Committees, which shall report their decisions to the Council at a special meeting to be called to consider nominations, not later than two days before the meeting of the Academy in December and April respectively.

ARTICLE 3. All nominations approved by the Council shall be read to the Academy at a meeting in December or in April, or be sent to the

Fellows in print with the official notice of the meeting, and shall then be posted in the Hall of the Academy until the balloting.

Not later than two weeks after any nomination is reported to the Academy, the Corresponding Secretary shall send to every Fellow having the right to vote a brief printed account of the nominee.

See Chap. ii. ; chap. vi. art. 1 ; chap. ix. art. 1.

CHAPTER IV

OFFICERS

ARTICLE 1. The Officers of the Academy shall be a President (who shall be Chairman of the Council), three Vice-Presidents (one from each Class), a Corresponding Secretary (who shall be Secretary of the Council), a Recording Secretary, a Treasurer, and a Librarian, all of whom shall be elected by ballot at the Annual Meeting, and shall hold their respective offices for one year, and until others are duly chosen and installed.

There shall be also twelve Councillors, one from each Section of each Class. At the Annual Meeting in 1912 three Councillors, one from each Class, shall be elected by ballot to serve for one year, three for two years, three for three years, and three for four years. At each subsequent Annual Meeting three Councillors, one from each Class, shall be elected by ballot to serve for the full term of four years and until others are duly chosen and installed. The same Fellow shall not be eligible for two successive terms.

The Councillors, with the other officers previously named, shall constitute the Council.

See Chap. x. art. 1.

ARTICLE 2. If any office shall become vacant during the year, the vacancy may be filled by the Council in its discretion for the unexpired term.

ARTICLE 3. At the Stated Meeting in March, the President shall appoint a Nominating Committee of three Fellows having the right to vote, one from each Class. This Committee shall prepare a list of nominees for the several offices to be filled, and for the Standing Committees, and cause it to be sent to the Recording Secretary not later than four weeks before the Annual Meeting.

ARTICLE 4. Independent nominations for any office, if signed by at least twenty Fellows having the right to vote, and received by the Recording Secretary not less than ten days before the Annual Meeting, shall be inserted, together with the list of nominees prepared by the Nominating Committee, in the call therefor, and shall be mailed to all the Fellows.

See Chap. vi. art. 2.

ARTICLE 5. The Recording Secretary shall prepare for use in voting at the Annual Meeting a ballot containing the names of all persons duly nominated for office.

CHAPTER V

THE PRESIDENT

ARTICLE 1. The President, or in his absence the senior Vice-President present (seniority to be determined by length of continuous fellowship in the Academy), shall preside at all meetings of the Academy. In the absence of all these officers, a Chairman of the meeting shall be chosen by ballot.

ARTICLE 2. Unless otherwise ordered, all Committees which are not elected by ballot shall be appointed by the presiding officer.

ARTICLE 3. Any deed or writing to which the Corporate Seal is to be affixed, except leases of real estate, shall be executed in the name of the Academy by the President or, in the event of his death, absence, or inability, by one of the Vice-Presidents, when thereto duly authorized.

See Chap. ii. art. 7 ; chap. iv. art. 1, 3 ; chap. vi. art. 2 ; chap. vii. art. 1 ; chap. ix. art. 6 ; chap. x. art. 1, 2 ; chap. xi. art. 1.

CHAPTER VI

THE SECRETARIES

ARTICLE 1. The Corresponding Secretary shall conduct the correspondence of the Academy and of the Council, recording or making an entry of all letters written in its name, and preserving for the files all official papers which may be received. At each meeting of the Council he shall present the communications addressed to the Academy which

have been received since the previous meeting, and at the next meeting of the Academy he shall present such as the Council may determine.

He shall notify all persons who may be elected Fellows or Foreign Honorary Members, send to each a copy of the Statutes, and on their acceptance issue the proper Diploma. He shall also notify all meetings of the Council; and in case of the death, absence, or inability of the Recording Secretary he shall notify all meetings of the Academy.

Under the direction of the Council, he shall keep a List of the Fellows and Foreign Honorary Members, arranged in their several Classes and Sections. It shall be printed annually and issued as of the first day of July.

See Chap. ii. art. 7; chap. iii. art. 2, 3; chap. iv. art. 1; chap. ix. art. 6; chap. x. art. 1; chap. xi. art. 1.

ARTICLE 2. The Recording Secretary shall have the custody of the Charter, Corporate Seal, Archives, Statute-Book, Journals, and all literary papers belonging to the Academy.

Fellows borrowing such papers or documents shall receipt for them to their custodian.

The Recording Secretary shall attend the meetings of the Academy and keep a faithful record of the proceedings with the names of the Fellows present; and after each meeting is duly opened, he shall read the record of the preceding meeting.

He shall notify the meetings of the Academy to each Fellow by mail at least seven days beforehand, and in his discretion may also cause the meetings to be advertised; he shall apprise Officers and Committees of their election or appointment, and inform the Treasurer of appropriations of money voted by the Academy.

He shall post in the Hall a list of the persons nominated for election into the Academy; and after all elections, he shall insert in the Records the names of the Fellows by whom the successful candidates were nominated.

In the absence of the President and of the Vice-Presidents he shall, if present, call the meeting to order, and preside until a Chairman is chosen.

See Chap. i.; chap. ii. art. 7; chap. iv. art. 3, 4, 5; chap. ix. art. 6; chap. x. art. 1, 2; chap. xi. art. 1, 3.

ARTICLE 3. The Secretaries, with the Chairman of the Committee of Publication, shall have authority to publish such of the records of the meetings of the Academy as may seem to them likely to promote its interests.

CHAPTER VII

THE TREASURER AND THE TREASURY

ARTICLE 1. The Treasurer shall collect all money due or payable to the Academy, and all gifts and bequests made to it. He shall pay all bills due by the Academy, when approved by the proper officers, except those of the Treasurer's office, which may be paid without such approval; in the name of the Academy he shall sign all leases of real estate; and, with the written consent of a member of the Committee on Finance, he shall make all transfers of stocks, bonds, and other securities belonging to the Academy, all of which shall be in his official custody.

He shall keep a faithful account of all receipts and expenditures, submit his accounts annually to the Auditing Committee, and render them at the expiration of his term of office, or whenever required to do so by the Academy or the Council.

He shall keep separate accounts of the income of the Rumford Fund, and of all other special Funds, and of the appropriation thereof, and render them annually.

His accounts shall always be open to the inspection of the Council.

ARTICLE 2. He shall report annually to the Council at its March meeting on the expected income of the various Funds and from all other sources during the ensuing financial year. He shall also report the names of all Fellows who may be then delinquent in the payment of their Annual Dues.

ARTICLE 3. He shall give such security for the trust reposed in him as the Academy may require.

ARTICLE 4. With the approval of a majority of the Committee on Finance, he may appoint an Assistant Treasurer to perform his duties, for whose acts, as such assistant, he shall be responsible; or, with like approval and responsibility, he may employ any Trust Company doing business in Boston as his agent for the same purpose, the compensation of such Assistant Treasurer or agent to be fixed by the Committee on Finance and paid from the funds of the Academy.

ARTICLE 5. At the Annual Meeting he shall report in print all his official doings for the preceding year, stating the amount and condition

of all the property of the Academy entrusted to him, and the character of the investments.

ARTICLE 6. The Financial Year of the Academy shall begin with the first day of April.

ARTICLE 7. No person or committee shall incur any debt or liability in the name of the Academy, unless in accordance with a previous vote and appropriation therefor by the Academy or the Council, or sell or otherwise dispose of any property of the Academy, except cash or invested funds, without the previous consent and approval of the Council.

See Chap. ii. art. 4, 5; chap. vi. art. 2; chap. ix. art. 6; chap. x. art. 1, 2, 3; chap. xi. art. 1.

CHAPTER VIII

THE LIBRARIAN AND THE LIBRARY

ARTICLE 1. The Librarian shall have charge of the printed books, keep a correct catalogue thereof, and provide for their delivery from the Library.

At the Annual Meeting, as Chairman of the Committee on the Library, he shall make a Report on its condition.

ARTICLE 2. In conjunction with the Committee on the Library he shall have authority to expend such sums as may be appropriated by the Academy for the purchase of books, periodicals, etc., and for defraying other necessary expenses connected with the Library.

ARTICLE 3. All books procured from the income of the Rumford Fund or of other special Funds shall contain a book-plate expressing the fact.

ARTICLE 4. Books taken from the Library shall be receipted for to the Librarian or his assistant.

ARTICLE 5. Books shall be returned in good order, regard being had to necessary wear with good usage. If any book shall be lost or injured, the Fellow to whom it stands charged shall replace it by a new volume or by a new set, if it belongs to a set, or pay the current price thereof to the Librarian, whereupon the remainder of the set, if any,

shall be delivered to the Fellow so paying, unless such remainder be valuable by reason of association.

ARTICLE 6. All books shall be returned to the Library for examination at least one week before the Annual Meeting.

ARTICLE 7. The Librarian shall have the custody of the Publications of the Academy. With the advice and consent of the President, he may effect exchanges with other associations.

See Chap. ii. art. 6 ; chap. x. art. 1, 2.

CHAPTER IX

THE COUNCIL

ARTICLE 1. The Council shall exercise a discreet supervision over all nominations and elections to membership, and in general supervise all the affairs of the Academy not explicitly reserved to the Academy as a whole or entrusted by it or by the Statutes to standing or special committees.

It shall consider all nominations duly sent to it by any Class Committee, and present to the Academy for action such of these nominations as it may approve by a majority vote of the members present at a meeting, of whom not less than seven shall have voted in the affirmative.

With the consent of the Fellow interested, it shall have power to make transfers between the several Sections of the same Class, reporting action to the Academy.

See Chap. iii. art. 2, 3 ; chap. x. art. 1.

ARTICLE 2. Seven members shall constitute a quorum.

ARTICLE 3. It shall establish rules and regulations for the transaction of its business, and provide all printed and engraved blanks and books of record.

ARTICLE 4. It shall act upon all resignations of officers, and all resignations and forfeitures of fellowship ; and cause the Statutes to be faithfully executed.

It shall appoint all agents and subordinates not otherwise provided for by the Statutes, prescribe their duties, and fix their compensation.

They shall hold their respective positions during the pleasure of the Council.

ARTICLE 5. It may appoint, for terms not exceeding one year, and prescribe the functions of, such committees of its number, or of the Fellows of the Academy, as it may deem expedient, to facilitate the administration of the affairs of the Academy or to promote its interests.

ARTICLE 6. At its March meeting it shall receive reports from the President, the Secretaries, the Treasurer, and the Standing Committees, on the appropriations severally needed for the ensuing financial year. At the same meeting the Treasurer shall report on the expected income of the various Funds and from all other sources during the same year.

A report from the Council shall be submitted to the Academy, for action, at the March meeting, recommending the appropriation which in the opinion of the Council should be made.

On the recommendation of the Council, special appropriations may be made at any Stated Meeting of the Academy, or at a Special Meeting called for the purpose.

See Chap. x. art. 3.

ARTICLE 7. After the death of a Fellow or Foreign Honorary Member, it shall appoint a member of the Academy to prepare a Memoir for publication in the Proceedings.

ARTICLE 8. It shall report at every meeting of the Academy such business as it may deem advisable to present.

See Chap. ii. art. 4, 5, 8; chap. iv. art. 1, 2; chap. vi. art. 1; chap. vii. art. 1; chap. xi. art. 1, 4.

CHAPTER X

STANDING COMMITTEES

ARTICLE 1. The Class Committee of each Class shall consist of the Vice-President, who shall be chairman, and the four Councillors of the Class, together with such other officer or officers annually elected as may belong to the Class. It shall consider nominations to Fellowship in its own Class, and report in writing to the Council such as may receive at a Class Committee Meeting a majority of the votes cast, provided at least three shall have been in the affirmative.

See Chap. iii. art. 2.

ARTICLE 2. At the Annual Meeting the following Standing Committees shall be elected by ballot to serve for the ensuing year :

(i) *The Committee on Finance*, to consist of three Fellows, who, through the Treasurer, shall have full control and management of the funds and trusts of the Academy, with the power of investing the funds and of changing the investments thereof in their discretion.

See Chap. iv. art. 3 ; chap. vii. art. 1, 4 ; chap. ix. art. 6.

(ii) *The Rumford Committee*, to consist of seven Fellows, who shall report to the Academy on all applications and claims for the Rumford Premium. It alone shall authorize the purchase of books, publications and apparatus at the charge of the income from the Rumford Fund, and generally shall see to the proper execution of the trust.

See Chap. iv. art. 3 ; chap. ix. art. 6.

(iii) *The Cyrus Moors Warren Committee*, to consist of seven Fellows, who shall consider all applications for appropriations from the income of the Cyrus Moors Warren Fund, and generally shall see to the proper execution of the trust.

See Chap. iv. art. 3 ; chap. ix. art. 6.

(iv) *The Committee of Publication*, to consist of three Fellows, one from each Class, to whom all communications submitted to the Academy for publication shall be referred, and to whom the printing of the Proceedings and the Memoirs shall be entrusted.

It shall fix the price at which the Publications shall be sold ; but Fellows may be supplied at half price with volumes which may be needed to complete their sets, but which they are not entitled to receive gratis.

Two hundred extra copies of each paper accepted for publication in the Proceedings or the Memoirs shall be placed at the disposal of the author without charge.

See Chap. iv. art. 3 ; chap. vi. art. 1, 3 ; chap. ix. art. 6.

(v) *The Committee on the Library*, to consist of the Librarian, *ex officio*, as Chairman, and three other Fellows, one from each Class, who shall examine the Library and make an annual report on its condition and management.

See Chap. iv. art. 3 ; chap. viii. art. 1, 2 ; chap. ix. art. 6.

(vi) *The House Committee*, to consist of three Fellows, who shall have charge of all expenses connected with the House, including the general expenses of the Academy not specifically assigned to the care of other Committees or Officers.

See Chap. iv. art. 3 ; chap. ix. art. 6.

(vii) *The Committee on Meetings*, to consist of the President, the Recording Secretary, and three other Fellows, who shall have charge of plans for meetings of the Academy.

See Chap. iv. art. 3 ; chap. ix. art. 6.

(viii) *The Auditing Committee*, to consist of two Fellows, who shall audit the accounts of the Treasurer, with power to employ an expert and to approve his bill.

See Chap. iv. art. 3 ; chap. vii. art. 1 ; chap. ix. art. 6.

ARTICLE 3. The Standing Committees shall report annually to the Council in March on the appropriations severally needed for the ensuing financial year ; and all bills incurred on account of these Committees, within the limits of the several appropriations made by the Academy, shall be approved by their respective Chairmen.

In the absence of the Chairman of any Committee, bills may be approved by any member of the Committee whom he shall designate for the purpose.

See Chap. vii. art. 1, 7 ; chap ix. art. 6.

CHAPTER XI

MEETINGS, COMMUNICATIONS, AND AMENDMENTS

ARTICLE 1. There shall be annually four Stated Meetings of the Academy, namely, on the second Wednesday of January, March, May, and October. Only at these meetings, or at adjournments thereof regularly notified, or at Special Meetings called for the purpose, shall appropriations of money be made, or amendments of the Statutes or Standing Votes be effected.

The Stated Meeting in May shall be the Annual Meeting of the Corporation.

Special Meetings shall be called by either of the Secretaries at the request of the President, of a Vice-President, of the Council, or of ten

Fellows having the right to vote; and notifications thereof shall state the purpose for which the meeting is called.

A meeting for receiving and discussing literary or scientific communications may be held on the second or the fourth Wednesday, or both, of each month not appointed for Stated Meetings, excepting July, August, and September; but no business shall be transacted at any meeting which may be held on the fourth Wednesday.

ARTICLE 2. Twenty Fellows having the right to vote shall constitute a quorum for the transaction of business at Stated or Special Meetings. Fifteen Fellows shall be sufficient to constitute a meeting for literary or scientific communications and discussions.

ARTICLE 3. Upon the request of the presiding officer or the Recording Secretary, any motion or resolution offered at any meeting shall be submitted in writing.

ARTICLE 4. No report of any paper presented at a meeting of the Academy shall be published by any Fellow without the consent of the author; and no report shall in any case be published by any Fellow in a newspaper as an account of the proceedings of the Academy without the previous consent and approval of the Council.

ARTICLE 5. No Fellow shall introduce a guest at any meeting of the Academy until after the business has been transacted, and especially until after nominations to Fellowship have been read and the result of the balloting for candidates has been declared.

ARTICLE 6. The Academy shall not express its judgment on literary or scientific memoirs or performances submitted to it, or included in its Publications.

ARTICLE 7. All proposed Amendments of the Statutes shall be referred to a committee, and on its report, at a subsequent Stated Meeting or at a Special Meeting called for the purpose, two thirds of the ballots cast, and not less than twenty, must be affirmative to effect enactment.

ARTICLE 8. Standing Votes may be passed, amended, or rescinded at a Stated Meeting, or at a Special Meeting called for the purpose, by a vote of two thirds of the members present. They may be suspended by a unanimous vote.

See Chap. ii. art. 5, 8; chap. iii.; chap. iv. art. 3, 4, 5; chap. v. art. 1; chap. vi. art. 1, 2; chap. ix. art. 8.

STANDING VOTES

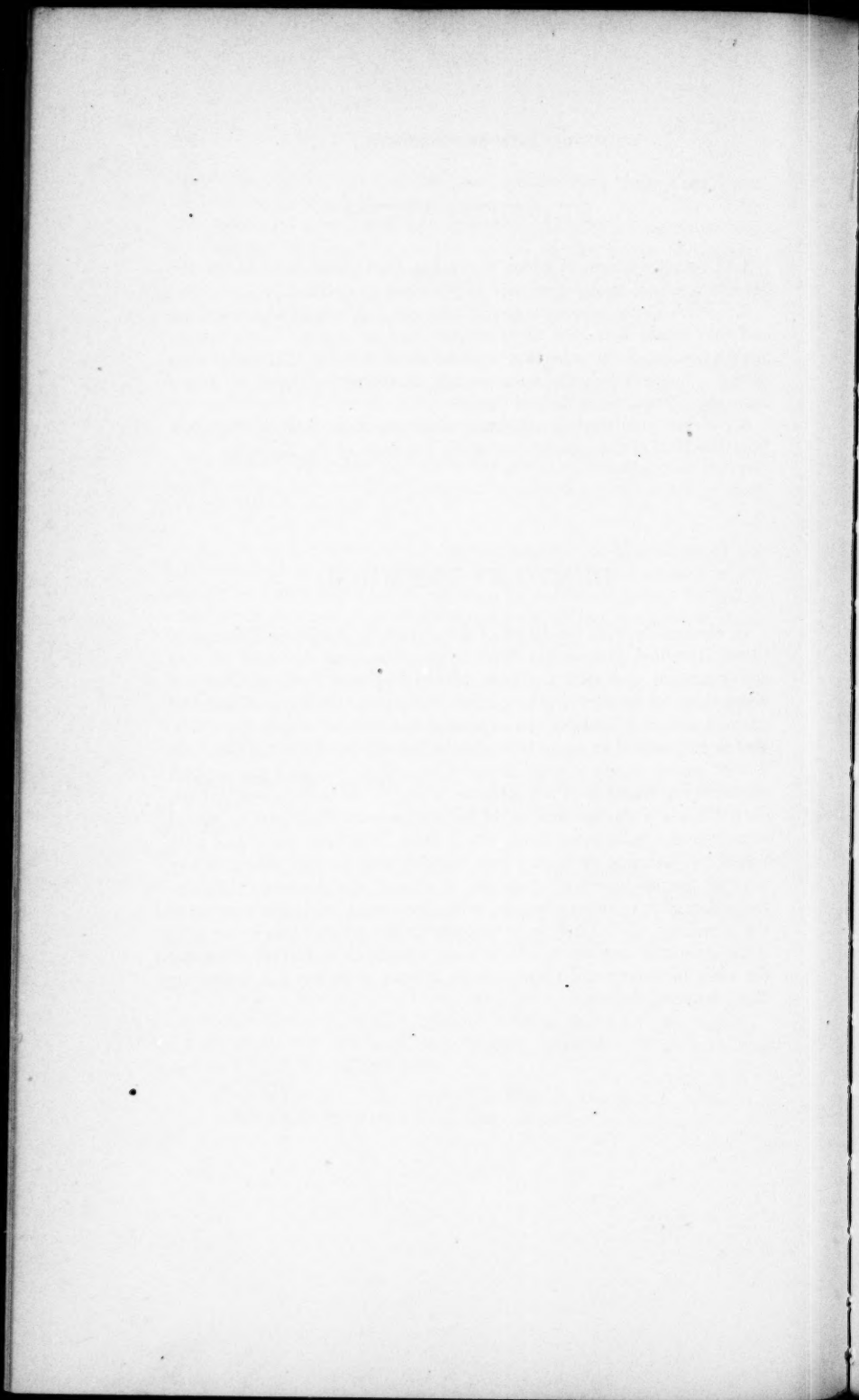
1. Communications of which notice has been given to either of the Secretaries shall take precedence of those not so notified.

2. Fellows may take from the Library six volumes at any one time, and may retain them for three months, and no longer. Upon special application, and for adequate reasons assigned, the Librarian may permit a larger number of volumes, not exceeding twelve, to be drawn from the Library for a limited period.

3. Works published in numbers, when unbound, shall not be taken from the Hall of the Academy without the leave of the Librarian.

RUMFORD PREMIUM

In conformity with the terms of the gift of Sir Benjamin Thompson, Count Rumford, of a certain Fund to the American Academy of Arts and Sciences, and with a decree of the Supreme Judicial Court of Massachusetts for carrying into effect the general charitable intent and purpose of Count Rumford, as expressed in his letter of gift, the Academy is empowered to make from the income of the Rumford Fund, as it now exists, at any Annual Meeting, an award of a gold and a silver medal, being together of the intrinsic value of three hundred dollars, as a Premium to the author of any important discovery or useful improvement in light or heat, which shall have been made and published by printing, or in any way made known to the public, in any part of the continent of America, or any of the American Islands; preference always being given to such discoveries as, in the opinion of the Academy, shall tend most to promote the good of mankind; and, if the Academy sees fit, to add to such medals, as a further Premium for such discovery and improvement, a sum of money not exceeding three hundred dollars.



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